



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: INDOLINONE COMBINATORIAL LIBRARIES AND RELATED PRODUCTS AND METHODS FOR THE TREATMENT OF DISEASE			
(57) Abstract			
<p>The present invention relates to organic molecules capable of modulating, regulating and/or inhibiting protein kinase signal transduction. Such compounds are useful for the treatment of diseases related to unregulated protein kinase signal transduction, including cell proliferative diseases such as cancer, atherosclerosis, arthritis and restenosis and metabolic diseases such as diabetes. The present invention features indolinone compounds that potently inhibit protein kinases and related products and methods. Inhibitors specific to the <i>FLK</i> protein kinase can be obtained by adding chemical substituents to the 3-[(indole-3-yl)methylene]-2-indolinone, in particular at the 1' position of the indole ring. Indolinone compounds that specifically inhibit the <i>FLK</i> and platelet derived growth factor protein kinases can harbor a tetrahydroindole or cyclopentano-b-pyrrol moiety. Indolinone compounds that are modified with substituents, particularly at the 5 position of the oxindole ring, can effectively activate protein kinases. This invention also features novel hydrosoluble indolinone compounds that are tyrosine kinase inhibitors and related products and methods.</p>			

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DESCRIPTIONIndolinone Combinatorial Libraries and Related Products  
and Methods for the Treatment of DiseaseIntroduction

The present invention relates to novel compounds capable of modulating, regulating and/or inhibiting protein kinase signal transduction. The present invention  
5 is also directed to methods of regulating, modulating or inhibiting protein kinases, whether of the receptor or non-receptor class, for the prevention and/or treatment of disorders related to unregulated protein kinase signal transduction, including cell proliferative and metabolic  
10 disorders.

Background of the Invention

The following description of the background of the invention is provided to aid in understanding the invention,  
15 tion, but is not admitted to be or describe prior art to the invention.

Protein kinases and protein phosphatases regulate a wide variety of cellular processes including metabolism, cell proliferation, cell differentiation, and cell survival by participating in signal transduction pathways. Alterations in the cellular function of a protein kinase or protein phosphatase can give rise to various diseased states in an organism. For example, many types of cancer tumors are associated with increases in the activity of  
20 specific protein kinases. Cell and tissue degeneration can also be associated with decreases in the activity of particular protein kinases.

Cellular signal transduction is a fundamental mechanism whereby extracellular stimuli are relayed to the  
30 interior of cells. One of the key biochemical mechanisms

of signal transduction involves the reversible phosphorylation of proteins. Phosphorylation of amino acids regulates the activity of mature proteins by altering their structure and function.

5       Phosphate most often resides on the hydroxyl moiety of serine, threonine, or tyrosine amino acids in proteins. Enzymes that mediate phosphorylation of cellular effectors fall into two classes. While protein phosphatases hydrolyze phosphate moieties from phosphoryl protein sub-  
10       strates, protein kinases transfer a phosphate moiety from adenosine triphosphate to protein substrates. The converse functions of protein kinases and protein phosphatases balance and regulate the flow of signals in signal transduction processes.

15       Protein kinases are divided into two groups - receptor and non-receptor type proteins. Receptor protein kinases comprise an extracellular region, a transmembrane region, and an intracellular region. Part of the intra-  
20       cellular region of receptor protein kinases harbors a catalytic domain. While non-receptor protein kinases do not harbor extracellular or transmembrane regions, they do comprise a region similar to the intracellular regions of their receptor counterparts.

      Protein kinases are divided further into three  
25       classes based upon the amino acids they act upon. Some incorporate phosphate on serine or threonine only, some incorporate phosphate on tyrosine only, and some incorporate phosphate on serine, threonine, and tyrosine.

      In an effort to discover novel treatments for dis-  
30       eases, biomedical researchers and chemists have designed, synthesized, and tested molecules that inhibit the function of protein kinases. Some small organic molecules form a class of compounds that modulate the function of protein kinases.



The compounds that can traverse cell membranes and are resistant to acid hydrolysis are potentially advantageous therapeutics as they can become highly bioavailable after being administered orally to patients. However, many of these protein kinase inhibitors only weakly inhibit the function of protein kinases. In addition, many inhibit a variety of protein kinases and will therefore cause multiple side-effects as therapeutics for diseases.

Some indolinone compounds, however, form classes of acid resistant and membrane permeable organic molecules that potently inhibit only specific protein kinases. Indolinone synthesis, methods of testing the biological activity of indolinones, and inhibition patterns of some indolinone derivatives are described in International Patent Publication No. WO96/40116, published December 19, 1996 entitled "Benzylidene-2-Indolinone Compounds for the Treatment of Disease" by Tang et al. (Lyon & Lyon Docket No. 223/298) and International Patent Publication No. WO 96/22976, published August 1, 1996 by Ballinari et al., both of which are incorporated herein by reference in their entirety, including any drawings.

Despite the significant progress that has been made in developing indolinone based pharmaceuticals, there remains a need in the art to identify the particular structures and substitution patterns that cause inhibition of particular protein kinases and other specified biological activities.

### Summary of The Invention

The present invention relates to organic molecules capable of modulating, regulating and/or inhibiting protein kinase signal transduction. Such compounds are useful for the treatment of diseases related to unregulated protein kinase signal transduction, including cell

proliferative diseases such as cancer, atherosclerosis, arthritis and restenosis and metabolic diseases such as diabetes. The protein kinases effected include, but are not limited to Flk, FGFR, PDGFR, and raf.

5       The present invention features indolinone compounds that potently inhibit protein kinases and related products and methods. Inhibitors specific to the *FLK* protein kinase can be obtained by adding chemical substituents to the 3-[(indole-3-yl)methylene]-2-indolinone, in particular  
10   at the 1' position of the indole ring. Indolinone compounds that specifically inhibit the *FLK* and platelet derived growth factor protein kinases can harbor a tetrahydroindole or cyclopentano-b-pyrrol moiety. Indolinone compounds that are modified with substituents,  
15   particularly at the 5 position of the oxindole ring, can effectively activate protein kinases. This invention also features novel hydrosoluble indolinone compounds that are tyrosine kinase inhibitors and related products and methods.

20       The compounds of the invention represent a new generation of potential therapeutics for diseases caused by one or more non-functional protein kinases. Neurodegenerative diseases fall into this class of diseases, including, but not limited to Parkinson's Disease and  
25   Alzheimers disease. The compounds can be modified such that they are specific to their target or targets and will subsequently cause few side effects and thus represent a new generation of potential cancer therapeutics. These properties are significant improvements over the currently  
30   utilized cancer therapeutics that cause multiple side effects and deleteriously weaken patients.

It is believed the compounds of the invention will minimize and obliterate solid tumors by specifically inhibiting the activity of the *FLK* protein kinase, or will

at least modulate or inhibit tumor growth and/or metastases. The *FLK* protein kinase regulates proliferation of blood vessels during angiogenesis. Increased rates of angiogenesis accompany cancer tumor growth in cells as  
5 cancer tumors must be nourished by oxygenated blood during growth. Therefore, inhibition of the *FLK* protein kinase and the corresponding decreases in angiogenesis will starve tumors of nutrients and most likely obliterate them.

10 While a precise understanding of the mechanism by which compounds inhibit PTKs (e.g., the fibroblast growth factor receptor 1 [FGFR1]) is not required in order to practice the present invention, the compounds are believed to interact with the amino acids of the PTKs' catalytic  
15 region. PTKs typically possess a bi-lobate structure, and ATP appears to bind in the cleft between the two lobes in a region where the amino acids are conserved among PTKs; inhibitors of PTKs are believed to bind to the PTKs through non-covalent interactions such as hydrogen bond-  
20 ing, Van der Waals interactions, and ionic bonding, in the same general region that ATP binds to the PTKs. More specifically, it is thought that the oxindole component of the compounds of the present invention binds in the same general space occupied by the adenine ring of ATP.  
25 Specificity of an indolinone PTK inhibitor for a particular PTK may be conferred by interactions between the constituents around the oxindole core with amino acid domains specific to individual PTKs. Thus, different indolinone substituents may contribute to preferential  
30 binding to particular PTKs. The ability to select those compounds active at different ATP<sup>(or other nucleotide)</sup> binding sites makes them useful in targeting any protein with such a site, not only protein tyrosine kinases, but also serine/threonine kinases and protein phosphatases. Thus, such compounds

have utility for *in vitro* assays on such proteins and for *in vivo* therapeutic effect through such proteins.

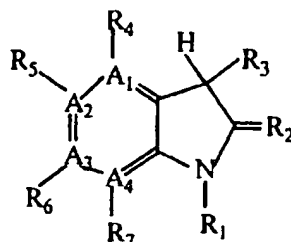
In one aspect the invention features a combinatorial library of indolinone compounds. The library includes a series of at least ten (preferably at least 50-100, more preferably at least 100-500, and most preferably at least 500-5,000) indolinones that can be formed by reacting an oxindole compound with an aldehyde. In preferred embodiments the indolinones in the library can be formed by reacting a type A oxindole with a type B aldehyde. Type A oxindoles and type B aldehydes are shown in Figures 1 and 2 respectively (and Tables 11 and 12 respectively), as explained in detail below. As can be seen, in the figures the oxindoles are labeled 01, 02, 03, ... and the aldehydes are named A1, A2, A3, .... Thus, one can readily appreciate that the combinatorial library could include any and all combinations of oxindoles and aldehydes, including the indolinones resulting from 01 and A1, 01 and A2, 01 and A3, 02 and A1, 02 and A2, 02 and A3, 03 and A1, 03 and A2, 03 and A3 and so on. Similarly, the indolinones in the library can be formed by any combination of the oxindoles in Table 11 with any of the aldehydes listed in Figure 2 or Table 12. Finally, the indolinones may also, of course, come from any combination of aldehydes listed in Table 12 with any oxindoles from Figure 1 or Table 11.

The term "combinatorial library" refers to a series of compounds. In the present case, the combinatorial library contains a series of indolinone compounds that can be formed by reacting an oxindole and an aldehyde. A wide variety of oxindoles and aldehydes may be used to create the library of indolinones.

The term "indolinone" is used as that term is commonly understood in the art and includes a large subclass

of substituted or unsubstituted compounds that are capable of being synthesized from an aldehyde moiety and an oxindol moiety, such as the compounds shown below.

The term "type A oxindole" is meant to include any and all of the oxindoles set forth in Figure 1 and Table 11. Oxindoles, as that term is used herein, typically have the structure set forth below:



(I)

10 wherein,

(a)  $A_1$ ,  $A_2$ ,  $A_3$ , and  $A_4$  are independently carbon or nitrogen;

(b)  $R_1$  is hydrogen or alkyl;

(c)  $R_2$  is oxygen or sulfur;

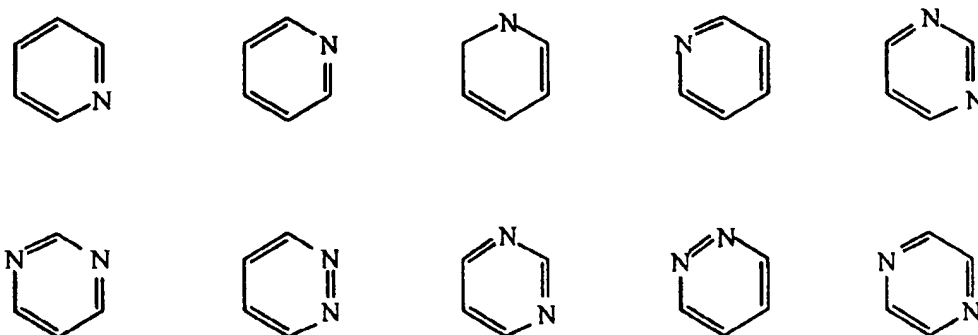
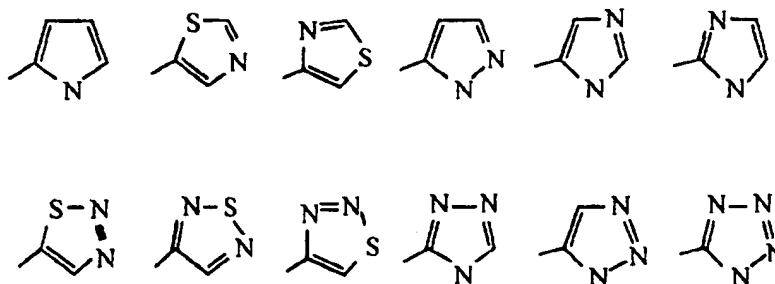
15 (d)  $R_3$  is hydrogen;

(e)  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  (i) are each independently selected from the group consisting of hydrogen, alkyl, alkoxy, aryl, aryloxy, alkaryl, alkaryloxy, halogen, trihalomethyl,  $S(O)R$ ,  $SO_2NRR'$ ,  $SO_3R$ ,  $SR$ ,  $NO_2$ ,  $NRR'$ ,  $OH$ ,  $CN$ ,  
 20  $C(O)R$ ,  $OC(O)R$ ,  $NHC(O)R$ ,  $(CH_2)_nCO_2R$ , and  $CONRR'$  or (ii) any two adjacent  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  taken together form a fused ring with the aryl portion of the oxindole-based portion of the indolinone.

It is to be understood that when  $A_1$ ,  $A_2$ ,  $A_3$ , and  $A_4$  is  
 25 nitrogen or sulfur that the corresponding  $R_4$ ,  $R_5$ ,  $R_6$ , or  $R_7$  is nothing and that the corresponding bond shown in structure I does not exist.

Examples of oxindoles having such fused rings (as described in (e) (ii) above) are shown in Fig. 1, compounds 044, 045, 047, 048, 050, 051, 052, 053, 055, 056, 058, 059, 061, 062, 064, 066, 067, 069, 070, and 073.

5 Other examples of suitable fused rings include the following:

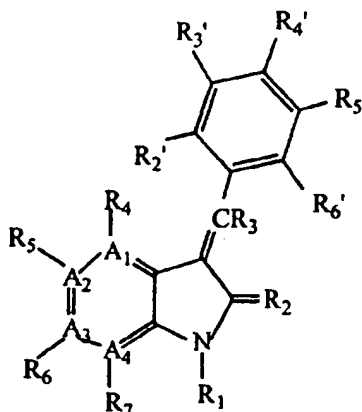


The six membered rings shown above also exemplify  
10 possible A rings in the structures II, III and IV.

The term "type B aldehyde" includes any and all of the aldehydes set forth in Figure 2 and Table 11. The term "aldehyde" is used as is commonly understood in the art to include substituted and unsubstituted aldehydes of  
15 the structure  $R_d\text{CHO}$  where  $R_d$  can be a wide variety of substituted or unsubstituted groups such as alkyl and aryl.

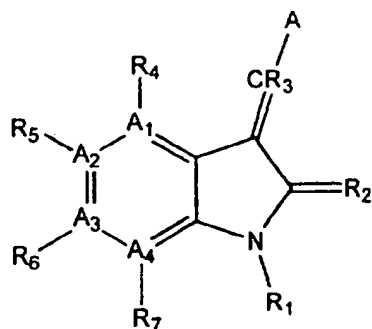
In yet another aspect, the invention provides a method of synthesizing an indolinone by reacting a type A oxindole with a type B aldehyde. The method of making the indolinones of the present invention may involve creating  
5 a combinatorial library of compounds as described above, testing each compound in biological assays such as those described herein, selecting one or more suitable compounds and synthesizing the selected compound or compounds.

Also featured is an indolinone compound having  
10 formula II or III:



(II)

10



(III)

wherein:

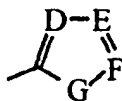
- 5 (a)  $A_1$ ,  $A_2$ ,  $A_3$ , and  $A_4$  are independently carbon or nitrogen;
- (b)  $R_1$  is hydrogen or alkyl;
- (c)  $R_2$  is oxygen or sulfur;
- (d)  $R_3$  is hydrogen;
- 10 (e)  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  (i) are each independently selected from the group consisting of hydrogen, alkyl, alkoxy, aryl, aryloxy, alkaryl, alkaryloxy, halogen, trihalomethyl,  $S(O)R$ ,  $SO_2NRR'$ ,  $SO_3R$ ,  $SR$ ,  $NO_2$ ,  $NRR'$ ,  $OH$ ,  $CN$ ,  $C(O)R$ ,  $OC(O)R$ ,  $NHC(O)R$ ,  $(CH_2)_nCO_2R$ , and  $CONRR'$  or (ii) any
- 15 two adjacent  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  taken together form a fused ring with the aryl ring of the oxindole-based portion of the indolinone;
- (f)  $R_2'$ ,  $R_3'$ ,  $R_4'$ ,  $R_5'$ , and  $R_6'$  are each independently selected from the group consisting of hydrogen, alkyl,
- 20 alkoxy, aryl, aryloxy, alkaryl, alkaryloxy, halogen, trihalomethyl,  $S(O)R$ ,  $SO_2NRR'$ ,  $SO_3R$ ,  $SR$ ,  $NO_2$ ,  $NRR'$ ,  $OH$ ,  $CN$ ,  $C(O)R$ ,  $OC(O)R$ ,  $NHC(O)R$ ,  $(CH_2)_nCO_2R$ , and  $CONRR'$ ;
- (g)  $n$  is 0, 1, 2, or 3;
- (h)  $R$  is hydrogen, alkyl or aryl;
- 25 (i)  $R'$  is hydrogen, alkyl or aryl; and



(j) A is a five membered heteroaryl ring selected from the group consisting of thiophene, pyrrole, pyrazole, imidazole, 1,2,3-triazole, 1,2,4-triazole, oxazole, isoxazole, thiazole, isothiazole, 2-sulfonylfuran, 4-alkylfuran, 1,2,3-oxadiazole, 1,2,4-oxadiazole, 1,2,5-oxadiazole, 1,3,4-oxadiazole, 1,2,3,4-oxatriazole, 1,2,3,5-oxatriazole, 1,2,3-thiadiazole, 1,2,4-thiadiazole, 1,2,5-thiadiazole, 1,3,4-thiadiazole, 1,2,3,4-thiatriazole, 1,2,3,5-thiatriazole, and tetrazole, optionally substituted at one or more positions with alkyl, alkoxy, aryl, aryloxy, alkaryl, alkaryloxy, halogen, trihalomethyl, S(O)R, SO<sub>2</sub>NRR', SO<sub>3</sub>R, SR, NO<sub>2</sub>, NRR', OH, CN, C(O)R, OC(O)R, NHC(O)R, (CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>R or CONRR'.

As used herein, the term "compound" is intended to include pharmaceutically acceptable salts, esters, amides, prodrugs, isomers and metabolites of the base compound.

In preferred embodiments of structure III, the A substituent may be a five membered heterocycle of formula IV shown below:



(IV)

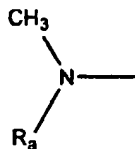
wherein D, E, F, and G are nitrogen, carbon, or sulfur atoms. The specific juxtaposition of groups D-G is limited to examples of heterocyclic groups known in the chemistry arts, such as the fused rings referred to above and all of which may be optionally substituted as described above in paragraph (j).

In preferred embodiments, the aryl ring ("the A ring") of the oxindole-derived portion of the indolinone (i.e., the ring shown in structures II and III with A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub>, and A<sub>4</sub>) has a polar substituent, preferably selected from the group consisting of NH<sub>2</sub>, COOH, SO<sub>3</sub>H, Br, Cl, I, F,

COCH<sub>2</sub>CH<sub>2</sub>COOH, COCH<sub>2</sub>Cl, piperazine, and CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> at the 4, 5, 6, and 7 carbon atom positions (identified by substituents R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub>, respectively in structures V and VI), most preferably hydrophillic groups such as NH<sub>2</sub>, COOH, SO<sub>3</sub>,  
5 COCH<sub>2</sub>CH<sub>2</sub>COOH, piperazine and CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>.

One approach to choosing target inhibitors of the FGFR (a protein kinase receptor linked to various disorders, such as Pfeiffer, Jackson-Weiss and Cruzon syndromes; dysplasias and hypochondroplasia; dwarfism; bone  
10 dysplasia; and developmental disorders involves selecting target compounds with a substituent on the A ring that mimics the triphosphate of ATP and thereby increases the affinity of target compounds for the active-site of the FGFR. Hydrophillic groups may act to mimic the triphos-  
15 phate at ATP, and also to improve the solubility of the final inhibitor. Without being bound to any theory, it appears that the trans form of the indolinones is generally a more favorable form for FGFR inhibitors.

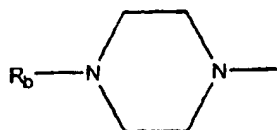
Amine-based substituents at positions 4, 5, and 6 at  
20 the A ring of structures II and III are a preferred class of substituents and an especially preferred class are amines of the structure:



wherein R<sub>a</sub> is CO(CH<sub>2</sub>)<sub>2</sub>COOH, aryl, alkyl, or contains COOH,  
25 OH, or NH<sub>2</sub>. These types of groups provide steric hindrance in order to force the isomer into a trans conformation which may be a favored property of FGFR inhibition and acts as a linker to a hydrophillic group.

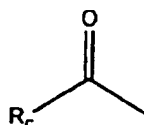
Another favored class of substituents on the aryl  
30 ring of structures II and III includes piperazine type substituents of the structure:

13



wherein  $R_b$  is preferably a negatively charged group, such as a negatively charged alkyl or acyl.

Yet another preferred class of substituents for the aryl ring of structures II and III are C-COR groups of the formula:



wherein  $R_c$  is a hydrophilic or negatively charged group, preferably at the 5 and/or 6 positions of the A ring of structures II and III, such as amide, ester,  $\text{CH}_2\text{CH}_2\text{COOH}$ ,  $\text{CH}_2\text{Cl}$ , or piperazine.  $R_c$  could also be linked to the aryl ring by a  $\text{sp}^3$  carbon or could be attached as  $\text{R}_c\text{O}_3\text{S}^-$ .

Yet another preferred set of substituents on the aryl ring are fused heterocyclic rings which can be synthesized by acylation of the arylamine followed by alkylation of the heterocyclic ring systems. Examples of several such compounds are set forth in Figure 1, compounds 044, 045, 047, 048, 050, 051, 052, 053, 055, 056, 058, 059, 061, 062, 064, 066, 067, 069, 070, and 073.

In another aspect, the invention features a 3-[(indole-3-yl)methylene]-2-indolinone compound having a substituent at the 1' position of the indole ring. The substituent at the 1' position of the indole ring is selected from the group consisting of

(a) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally

substituted with one or more halogen, or trihalomethyl substituents;

(b) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(c) an aldehyde or ketone of formula  $\text{-CO-R}_{12}$ , where  $\text{R}_{12}$  is selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(d) a carboxylic acid of formula  $\text{-(R}_{13}\text{)}_n\text{-COOH}$  or ester of formula  $\text{-(R}_{14}\text{)}_m\text{-COO-R}_{15}$ , where  $\text{R}_{13}$ ,  $\text{R}_{14}$ , and  $\text{R}_{15}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(e) a sulfone of formula  $\text{-(SO}_2\text{)-R}_{16}$ , where  $\text{R}_{16}$  is selected from the group consisting of alkyl and a five or six membered heterocyclic ring, where the ring is optionally substituted with an alkyl moiety;

(f)  $\text{-(R}_{17}\text{)}_n\text{-(indole-1-yl)}$  or  $\text{-(R}_{18}\text{)}_m\text{-CHOH-(R}_{19}\text{)}_p\text{-(indole-1-yl)}$ , where the indol moiety is optionally substituted where  $\text{R}_{17}$ ,  $\text{R}_{18}$ , and  $\text{R}_{19}$  are alkyl, and where  $m$ ,  $n$ , and  $p$  are independently 0 or 1; and

(g) taken together with a 2' substituent of the indole ring forms a five or six membered heterocyclic ring.

The term "alkyl" refers to a straight-chain, branched, or cyclic saturated aliphatic hydrocarbon. The alkyl group is preferably 1 to 10 carbons, more preferably a lower alkyl of from 1 to 7 carbons, and most preferably 1 to 4 carbons. Typical alkyl groups include methyl, ethyl, propyl, isopropyl, butyl, isobutyl, tertiary butyl, pentyl, hexyl and the like. The alkyl group may be substituted and some typical alkyl substituents include

hydroxyl, cyano, alkoxy, oxygen, sulfur, nitroxy, halogen, -N(CH<sub>3</sub>)<sub>2</sub>, amino, and -SH.

The term "methyl" refers to a saturated alkyl moiety of one carbon. The term "ethyl" refers to a saturated alkyl moiety of two carbons. The term "propyl" refers to a saturated alkyl moiety of three carbons. The term "butyl" refers to a saturated alkyl moiety of four carbons. The term "pentyl" refers to a saturated alkyl moiety of five carbons.

10 The term "aryl" refers to an aromatic group which has at least one ring having a conjugated pi electron system and includes both carbocyclic aryl (e.g. phenyl) and heterocyclic aryl groups (e.g. pyridine). Aryl moieties include monocyclic, bicyclic, and tricyclic rings, where  
15 each ring has preferably five or six members. The aryl moiety may be substituted and typical aryl substituents include halogen, trihalomethyl, hydroxyl, -SH, -OH, -NO<sub>2</sub>, amine, thioether, cyano, alkoxy, alkyl, and amino.

The terms "heterocycle" or "heterocyclic" refer to  
20 compounds that form a ring and contain up to four hetero atoms, the remainder of the atoms forming the ring being carbon. Thus, for example, each ring in the structure can contain zero, one, two, three, or four nitrogen, oxygen, or sulfur atoms within the ring. The ring can preferably  
25 be saturated with hydrogen atoms, more preferably harbor one or more unsaturations, and most preferably contain an aryl conjugated pi electron system. The rings are preferably eleven, twelve, thirteen, or fourteen membered rings, more preferably eight, nine, or ten membered rings, and  
30 most preferably five or six membered rings. Examples of such rings are furyl, thienyl, pyrrol, imidazolyl, indolyl, pyridinyl, thiadiazolyl, thiazolyl, piperazinyl, dibenzfuranyl, dibenzthienyl. The heterocyclic rings of the invention may be optionally substituted with one or

more functional groups which are attached commonly to such rings, such as, e.g., hydroxyl, bromo, fluoro, chloro, iodo, mercapto or thio, cyano, cyanoamido, alkylthio, heterocycle, aryl, heteroaryl, carboxyl, oxo, 5 alkoxy carbonyl, alkyl, alkenyl, nitro, amino, alkoxyl, amido, and the like. Structures of some preferred heterocyclic rings are the fused rings that have been shown above.

The term "aldehyde" refers to a chemical moiety with 10 formula  $-(R)_n-CHO$ , where R is selected from the group consisting of alkyl or aryl and n is 0 or 1.

The term "ketone" refers to a chemical moiety with formula  $-(R)_n-CO-R'$ , where R and R' are selected from the group consisting of alkyl or aryl and n is 0 or 1.

15 The term "carboxylic acid" refers to a chemical moiety with formula  $-(R)_n-COOH$ , where R is selected from the group consisting of alkyl or aryl and n is 0 or 1.

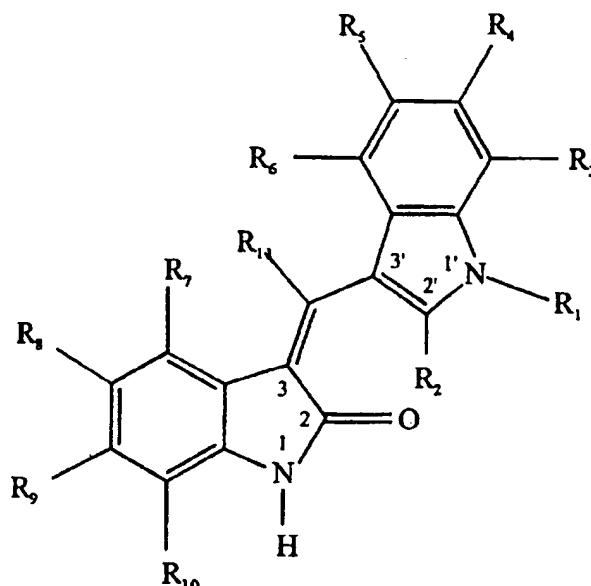
The term "ester" refers to a chemical moiety with formula  $-(R)_n-COOR'$ , where R and R' are independently 20 selected from the group consisting of alkyl or aryl and n is 0 or 1.

The term "sulfone" refers to a chemical moiety with formula  $-SO_2-R$ , where R is selected from the group consisting of alkyl or aryl.

25 The term "pharmaceutically acceptable salt" refers to a formulation of a compound that does not cause significant irritation to an organism and does not abrogate the biological activity and properties of the compound. Pharmaceutical salts can be obtained by reacting a compound of the invention with inorganic acids such as 30 hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, phosphoric acid, methanesulfonic acid, ethanesulfonic acid, p-toluenesulfonic acid, salicylic acid and the like.

The term "prodrug" refers to an agent that is converted into the parent drug in vivo. Prodrugs may be easier to administer than the parent drug in some situations. For example, the prodrug may be bioavailable by oral administration but the parent is not, or the prodrug may improve solubility to allow for intravenous administration.

A preferred embodiment of the invention relates to compound of the following formula,



(V)

where (a) R<sub>1</sub> as is described above for the substituent at the 1' position of the indole ring;

(b) R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of,

- (i) hydrogen;
- (ii) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;
- (iii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;
- (iv) a ketone of formula  $-\text{CO}-\text{R}_{20}$ , where  $\text{R}_{20}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring
- (v) a carboxylic acid of formula  $-(\text{R}_{21})_n-\text{COOH}$  or ester of formula  $-(\text{R}_{22})-\text{COO}-\text{R}_{23}$ , where  $\text{R}_{21}$ ,  $\text{R}_{22}$ , and  $\text{R}_{23}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;
- (vi) halogen;
- (vii) an alcohol of formula  $(\text{R}_{24})_m-\text{OH}$  or an ether of formula  $-(\text{R}_{24})_n-\text{O}-\text{R}_{25}$ , where  $\text{R}_{24}$  and  $\text{R}_{25}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;
- (viii)  $-\text{NR}_{26}\text{R}_{27}$ , where  $\text{R}_{26}$  and  $\text{R}_{27}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;
- (ix)  $-\text{NHCOR}_{28}$ , where  $\text{R}_{28}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;



- (x)  $-\text{SO}_2\text{NR}_{29}\text{R}_{30}$ , where  $\text{R}_{29}$  and  $\text{R}_{30}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;
- (xi) any two of  $\text{R}_3$ ,  $\text{R}_4$ ,  $\text{R}_5$ , or  $\text{R}_6$  taken together form a bicyclic or tricyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring;
- (c)  $\text{R}_7$ ,  $\text{R}_8$ ,  $\text{R}_9$ , and  $\text{R}_{10}$  are independently selected from the group consisting of,
- (i) hydrogen;
- (ii) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, aldehyde, or trihalomethyl substituents;
- (iii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;
- (iv) an aldehyde or ketone of formula  $-\text{CO}-\text{R}_{31}$ , where  $\text{R}_{31}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;
- (v) a carboxylic acid of formula  $-(\text{R}_{32})_n-\text{COOH}$  or ester of formula  $-(\text{R}_{33})_m-\text{COO}-\text{R}_{34}$ , where  $\text{R}_{32}$ ,  $\text{R}_{33}$ , and  $\text{R}_{34}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $n$  and  $m$  are independently 0 or 1;
- (vi) halogen;
- (vii) an alcohol of formula  $(\text{R}_{35})_n-\text{OH}$  or an ether of formula  $-(\text{R}_{35})_n-\text{O}-\text{R}_{36}$ , where  $\text{R}_{35}$  and  $\text{R}_{36}$  are independently chosen from the group consisting of alkyl or a

five or six membered heterocyclic ring and m and n are independently 0 or 1;

(viii)  $-NR_{37}R_{38}$ , where  $R_{37}$  and  $R_{38}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(ix)  $-NHCOR_{39}$ , where  $R_{39}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(x)  $-SO_2NR_{40}R_{41}$ , where  $R_{40}$  and  $R_{41}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(xi) any two of  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring; and

(d)  $R_{11}$  is hydrogen or alkyl; provided that at least one of  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  is alkyl or provided that at least four of  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  are not hydrogen.

In preferred embodiments of the invention as shown in structure V above,  $R_1$  is preferably a lower alkyl, branched or unbranched, more preferably an unbranched lower alkyl (e.g., ethyl, propyl, isopropyl, butyl, tertiary butyl, pentyl), and most preferably a methyl moiety.

In other preferred embodiments one or more of  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ , and  $R_{10}$  of structure V are a heterocyclic ring. The heterocycle is preferably selected from the group consisting of five, six, eight, nine, ten, eleven, twelve, thirteen, and fourteen membered aryl or non-aryl rings. The heterocycles can be furyl, thienyl, pyrrol, imidazolyl, indolyl, pyridinyl, thiadiazolyl,

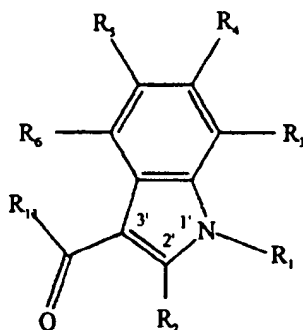
thiazolyl, piperazinyl, dibenzfuranyl, dibenzthienyl, 2-aminothiazol-4-yl, 2-amino-5-chlorothiazol-4-yl, 2-amino-thiadiazol-4-yl, 2,3-dioxopiperazinyl, 4-alkylpiperazinyl, 2-iodo-3-dibenzfuranyl, and  
 5 3-hydroxy-4-dibenzthienyl.  $R_2$  preferably is lower alkyl, more preferably methyl, or phenyl or biphenyl preferably mono-substituted with halogen.  $R_3$ ,  $R_4$ ,  $R_5$  and mono- $R_6$  preferably are selected from the group consisting of hydrogen, unsubstituted lower alkyls, halogen, methoxy,  
 10 carboncyclic and ether.  $R_{11}$  is preferably hydrogen.

In especially preferred embodiments of structure V,  $R_1$  is methyl and  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are hydrogen, or  $R_1$  and  $R_7$  are methyl and  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_6$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are hydrogen. Other especially preferred  
 15 compounds are set forth in the tables and examples set forth herein.

In another aspect, the invention features a method of synthesizing an indolinone compound, where the method comprises the steps of:

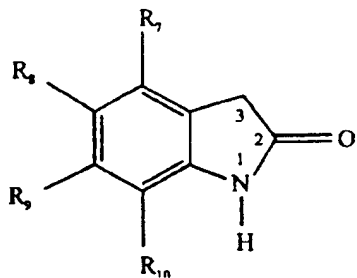
20 (a) reacting an aldehyde of formula VI with an oxindol of formula VII,

VI



22

VII



where  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are described herein; and

(b) separating the indolinone compound from the  
5 aldehyde and oxindol reactants.

The term "synthesizing" defines a method of combining multiple compounds together and/or chemically modifying the compound(s) in a controlled environment. A controlled environment preferably includes a glass vessel, a stirring  
10 rod or bar, a heating or cooling source, and specific organic solvents.

The term "reacting" refers to mixing two compounds together in a controlled environment. The compounds that are mixed together and reacted with one another are termed  
15 "reactants".

The term "separating" describes methods of segregating compounds from one or more other compounds. Compounds can be separated from one another by using techniques known in the art which include, but are not limited to,  
20 column chromatography techniques and solvent phase separation techniques.

In another aspect, the invention features optionally substituted 3-[(tetrahydroindole-2-yl)methylene]-2-indolinone and 3-[(cyclopentano-b-pyrrol-2-yl)methylene]-  
25 2-indolinone compounds.

The term "optionally substituted" refers, for example, to a benzene ring that either harbors a hydrogen at

a particular position or optionally harbors another substituent at that position. The term "optionally substituted" refers to other molecules in addition to benzene. A ring structure, for example can be N-substituted or C-substituted.

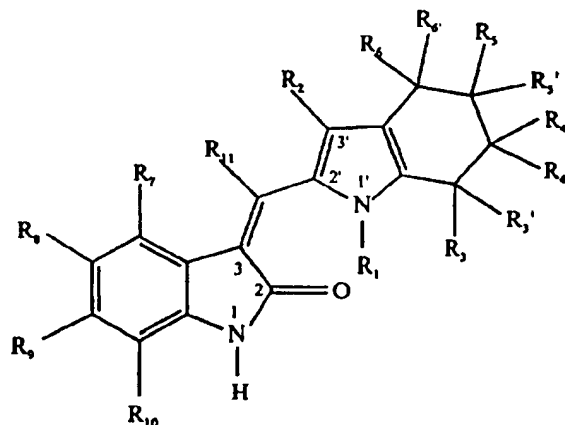
The term "N-substituted" refers to a compound that harbors chemical substituents attached to a nitrogen atom in a ring of the indolinone.

The term "C-substituted" refers to a compound that  
10 harbors chemical substituents attached to a carbon atom in  
the indolinone.

The term "independently selected" refers to a molecule that harbors one substituent chosen from a group of substituents.

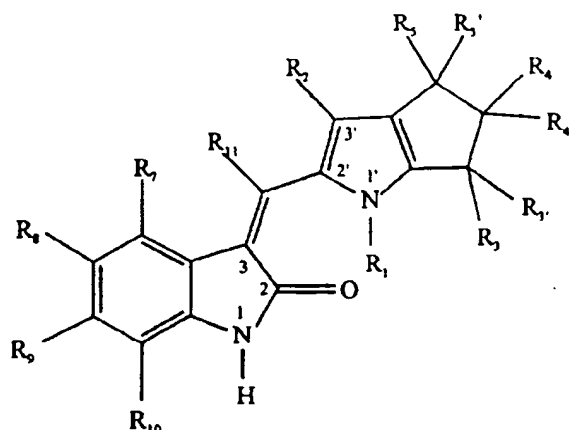
15        A preferred embodiment of the invention relates to an  
indolinone compound of the following formula,

## VIII



24

IX



where (a)  $R_1$  is selected from the group consisting of,

- (i) hydrogen;
- (ii) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;
- (iii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;
- (iv) ketone of formula  $-CO-R_{11}$ , where  $R_{11}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;
- (v) a carboxylic acid of formula  $-(R_{12})_n-COOH$  or ester of formula  $-(R_{13})_m-COO-R_{14}$ , where  $R_{12}$ ,  $R_{13}$ , and  $R_{14}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $n$  and  $m$  are independently 0 or 1;
- (vi) a sulfone of formula  $-(SO_2)-R_{15}$ , where  $R_{15}$  is selected from the group consisting of alkyl or a

five or six membered heterocyclic ring, where the ring is optionally substituted with an alkyl moiety;

(vii)  $-(R_{16})_n-(\text{indole-1-yl})$  or  $-(R_{17})_m-\text{CHOH}-$   
( $R_{18}$ ) $p-(\text{indole-1-yl})$ , where the indole moiety is optionally  
5 substituted with an aldehyde and  $R_{16}$ ,  $R_{17}$ , and  $R_{18}$  are alkyl  
and  $n$ ,  $m$ , and  $p$  are independently 0 or 1;

(viii) taken together with a 2' substituent  
of the indole ring form a tricyclic moiety, where each  
ring in the tricyclic moiety is a five or six membered  
10 heterocyclic ring;

(b)  $R_2$ ,  $R_3$ ,  $R_3'$ ,  $R_4$ ,  $R_4'$ ,  $R_5$ ,  $R_5'$ ,  $R_6$ , and  $R_6'$  are  
independently selected from the group consisting of,

(i) hydrogen;

(ii) alkyl that is optionally substituted  
15 with a monocyclic or bicyclic five, six, eight, nine, or  
ten membered heterocyclic ring, where the ring is option-  
ally substituted with one or more halogen, aldehyde, or  
trihalomethyl substituents;

(iii) five, six, eight, nine, or ten  
20 membered monocyclic or bicyclic heterocyclic ring, where  
the ring is optionally substituted with one or more  
halogen or trihalomethyl substituents;

(iv) ketone of formula  $-\text{CO}-R_{20}$ , where  $R_{20}$  is  
selected from the group consisting of hydrogen, alkyl, or  
25 a five or six membered heterocyclic ring;

(v) a carboxylic acid of formula  $-(R_{21})_n-$   
 $\text{COOH}$  or ester of formula  $-(R_{22})-\text{COO}-R_{23}$ , where  $R_{21}$ ,  $R_{22}$ , and  
 $R_{23}$  are independently selected from the group consist-  
ing of alkyl or a five or six membered heterocyclic ring  
30 and  $m$  and  $n$  are independently 0 or 1;

(vi) halogen;

(vii) an alcohol of formula  $(R_{24})_m-\text{OH}$  or an ether  
of formula  $-(R_{24})_n-\text{O}-R_{25}$ , where  $R_{24}$  and  $R_{25}$  are independently  
selected from the group consisting of alkyl and a five or

six membered heterocyclic ring and m and n are independently 0 or 1;

(viii)  $-NR_{26}R_{27}$ , where  $R_{26}$  and  $R_{27}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(ix)  $-NHCOR_{28}$ , where  $R_{28}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(x)  $-SO_2NR_{29}R_{30}$ , where  $R_{29}$  and  $R_{30}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(xi) any two of  $R_3$ ,  $R_3'$ ,  $R_4$ ,  $R_4'$ ,  $R_5$ ,  $R_5'$ ,  $R_6$ , or  $R_6'$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring;

(c)  $R_7$ ,  $R_8$ ,  $R_9$ , and  $R_{10}$  are independently selected from the group consisting of,

(i) hydrogen;

(ii) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(iii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iv) ketone of formula  $-CO-R_{31}$ , where  $R_{31}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;



(v) a carboxylic acid of formula  $-(R_{32})_n-$ COOH or ester of formula  $-(R_{33})_m-\text{COO}-R_{34}$ , where  $R_{32}$ ,  $R_{33}$ , and  $R_{34}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring  
5 and n and m are independently 0 or 1;

(vi) halogen;

(vii) an alcohol of formula  $(R_{35})_m-\text{OH}$  or an ether of formula  $-(R_{35})_n-\text{O}-R_{36}$ , where  $R_{35}$  and  $R_{36}$  are independently chosen from the group consisting of alkyl or a  
10 five or six membered heterocyclic ring and m and n are independently 0 or 1;

(viii)  $-\text{NR}_{37}R_{38}$ , where  $R_{37}$  and  $R_{38}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic  
15 ring;

(ix)  $-\text{NHCOR}_{39}$ , where  $R_{39}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

20 (x)  $-\text{SO}_2\text{NR}_{40}R_{41}$ , where  $R_{40}$  and  $R_{41}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(xi) any two of  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  taken together form a bicyclic or tricyclic heterocyclic moiety  
25 fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring; and

(d)  $R_{11}$  is hydrogen or alkyl.

Another preferred embodiment of the invention relates  
30 to indolinone compounds of structures VIII and IX, where  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_3'$ ,  $R_4$ ,  $R_4'$ ,  $R_5$ ,  $R_5'$ ,  $R_6$ ,  $R_6'$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are hydrogen.

In another preferred embodiment, the invention relates to oxidolinone compounds of structures VIII and

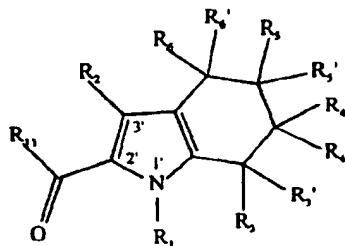
IX, where  $R_8$  is bromine, chlorine, or  $NH_2$  and  $R_1, R_2, R_3, R_3', R_4, R_4', R_5, R_5', R_6, R_6', R_7, R_9, R_{10}$ , and  $R_{11}$  are hydrogen.

In yet another preferred embodiment, the invention  
5 relates to indolinone compounds of structures VIII and IX, where  $R_7$  is methyl and  $R_1, R_2, R_3, R_3', R_4, R_4', R_5, R_5', R_6, R_6', R_7, R_9, R_{10}$ , and  $R_{11}$  are hydrogen.

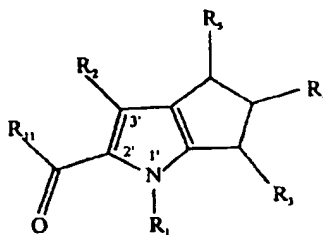
In another aspect, the invention features a method of  
synthesizing an indolinone compound, where the method  
10 comprises the steps of:

(a) reacting an aldehyde of formula X or XI with  
an oxindol of formula XII,

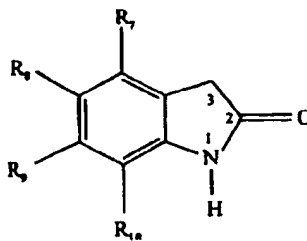
X



15 XI



XII



where  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_3'$ ,  $R_4$ ,  $R_4'$ ,  $R_5$ ,  $R_5'$ ,  $R_6$ ,  $R_6'$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are described herein; and

(b) separating the indolinone compound from the aldehyde and oxindole reactants.

5 In another aspect, the invention features an indolinone compound having a substituent at the 5 position of the oxindole ring, where the substituent at the 5 position of the oxindole ring is selected from the group consisting of:

10 (a) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

15 (b) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(c) a ketone of formula  $-\text{CO}-R_{10}$ , where  $R_{10}$  is  
20 selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

(d) a carboxylic acid of formula  $-(R_{11})_n-\text{COOH}$  or ester of formula  $-(R_{12})-\text{COO}-R_{13}$ , where  $R_{11}$ ,  $R_{12}$ , and  $R_{13}$  and  
25 are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(e) halogen;

(f) an alcohol of formula  $(R_{14})_m-\text{OH}$  or an ether of formula  $-(R_{14})_n-\text{O}-R_{15}$ , where  $R_{14}$  and  $R_{15}$  are independently  
30 selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

30

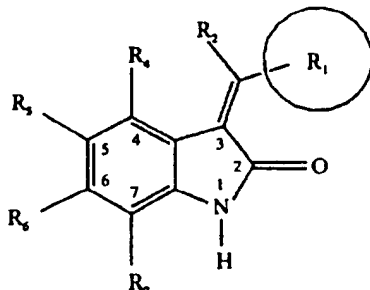
(g)  $-NR_{16}R_{17}$ , where  $R_{16}$  and  $R_{17}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(h)  $-NHCOR_{18}$ , where  $R_{18}$  is selected from the group consisting of alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(i)  $-SO_2NR_{19}R_{20}$ , where  $R_{19}$  and  $R_{20}$  are selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(j) any two of  $R_4$ ,  $R_5$ ,  $R_6$ , or  $R_7$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring.

A preferred embodiment of the invention relates to a compound of the following formula,



(XIII)

20

where (a)  $R_5$  is selected from the group consisting of,

(i) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

- (ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;
- 5 (iii) a ketone of formula  $-\text{CO}-\text{R}_{10}$ , where  $\text{R}_{10}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;
- (iv) a carboxylic acid of formula  $-(\text{R}_{11})_n-\text{COOH}$  or ester of formula  $-(\text{R}_{12})-\text{COO}-\text{R}_{13}$ , where  $\text{R}_{11}$ ,  $\text{R}_{12}$ , and  
10  $\text{R}_{13}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;
- (v) halogen;
- (vi) an alcohol of formula  $(\text{R}_{14})_m-\text{OH}$  or an  
15 ether of formula  $-(\text{R}_{14})_n-\text{O}-\text{R}_{15}$ , where  $\text{R}_{14}$  and  $\text{R}_{15}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;
- (vii)  $-\text{NR}_{16}\text{R}_{17}$ , where  $\text{R}_{16}$  and  $\text{R}_{17}$  are independ-  
20 ently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;
- (viii)  $-\text{NHCOR}_{18}$ , where  $\text{R}_{18}$  is selected from the group consisting of alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substi-  
25 tuted with alkyl, halogen, carboxylate, or ester;
- (ix)  $-\text{SO}_2\text{NR}_{19}\text{R}_{20}$ , where  $\text{R}_{19}$  and  $\text{R}_{20}$  are selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;
- (x) any two of  $\text{R}_4$ ,  $\text{R}_5$ ,  $\text{R}_6$ , or  $\text{R}_7$  taken  
30 together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the oxindole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring;

(b)  $R_1$  is selected from the group consisting of a five, six, eight, nine, and ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more substituents selected from the group consisting of

(i) hydrogen and alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iii) a ketone of formula  $-\text{CO}-R_{21}$ , where  $R_{21}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

(iv) a carboxylic acid of formula  $-(R_{22})_n-\text{COOH}$  or ester of formula  $-(R_{23})-\text{COO}-R_{24}$ , where  $R_{22}$ ,  $R_{23}$ , and  $R_{24}$  and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(v) halogen;

(vi) an alcohol of formula  $(R_{25})_m-\text{OH}$  or an ether of formula  $-(R_{25})_n-\text{O}-R_{26}$ , where  $R_{25}$  and  $R_{26}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(vii)  $-\text{NR}_{27}R_{28}$ , where  $R_{27}$  and  $R_{28}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(viii)  $-\text{NHCOR}_{29}$ , where  $R_{29}$  is selected from the group consisting of alkyl, and a five or six membered

heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(ix)  $-\text{SO}_2\text{NR}_{30}\text{R}_{31}$ , where  $\text{R}_{30}$  and  $\text{R}_{31}$  are selected from the group consisting of hydrogen, alkyl, and  
5 a five or six membered heterocyclic ring;

(c)  $\text{R}_4$ ,  $\text{R}_6$ , and  $\text{R}_7$  are independently selected from the group consisting of,

(i) hydrogen and alkyl that is optionally substituted with a monocyclic or bicyclic five, six,  
10 eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where  
15 the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iii) a ketone of formula  $-\text{CO}-\text{R}_{32}$ , where  $\text{R}_{32}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

20 (iv) a carboxylic acid of formula  $-(\text{R}_{33})_n-\text{COOH}$  or ester of formula  $-(\text{R}_{34})-\text{COO}-\text{R}_{35}$ , where  $\text{R}_{33}$ ,  $\text{R}_{34}$ , and  $\text{R}_{35}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

25 (v) halogen;

(vi) an alcohol of formula  $(\text{R}_{36})_m-\text{OH}$  or an ether of formula  $-(\text{R}_{36})_n-\text{O}-\text{R}_{37}$ , where  $\text{R}_{36}$  and  $\text{R}_{37}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are  
30 independently 0 or 1;

(vii)  $-\text{NR}_{38}\text{R}_{39}$ , where  $\text{R}_{38}$  and  $\text{R}_{39}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(viii)  $\text{-NHCOR}_{40}$ , where  $R_{40}$  is selected from the group consisting of alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

- 5 (ix)  $\text{-SO}_2\text{NR}_{41}\text{R}_{42}$ , where  $R_{41}$  and  $R_{42}$  are selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring; and

(d)  $R_2$  is hydrogen or alkyl.

In preferred embodiments of the invention shown in  
10 structure XIII above one or more of  $R_1$ ,  $R_4$ ,  $R_5$ ,  $R_6$ , or  $R_7$  are a heterocyclic ring. Preferred heterocycles of the invention are described herein.

Another preferred embodiment of the invention shown in structure XIII above is an indolinone compound, where  
15  $R_1$  is (3,5-dimethylpyrrol)-2-yl,  $R_5$  is  $\text{-COOH}$ , and  $R_2$ ,  $R_4$ ,  $R_6$ , and  $R_7$  are hydrogen.

Another preferred embodiment of the invention shown in structure XIII above is an indolinone compound, where  
20  $R_1$  is (3,5-diethylpyrrol)-2-yl,  $R_5$  is  $\text{-COOH}$ , and  $R_2$ ,  $R_4$ ,  $R_6$ , and  $R_7$  are hydrogen.

Another preferred embodiment of the invention shown in structure XIII above is an indolinone compound, where  
 $R_1$  is (3,5-diisopropylpyrrol)-2-yl,  $R_5$  is  $\text{-COOH}$ , and  $R_2$ ,  $R_4$ ,  $R_6$ , and  $R_7$  are hydrogen.

25 Another preferred embodiment of the invention shown in structure XIII above is an indolinone compound, where  $R_1$  is (3,5-dimethylpyrrol)-2-yl,  $R_5$  is  $\text{-(CH}_2)_2\text{COOH}$ , and  $R_2$ ,  $R_4$ ,  $R_6$ , and  $R_7$  are hydrogen.

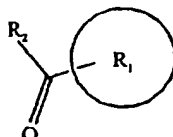
Another preferred embodiment of the invention shown  
30 in structure XIII above is an indolinone compound, where  $R_1$  is (5-methylthiophene)-2-yl,  $R_5$  is  $\text{-COOH}$ , and  $R_2$ ,  $R_4$ ,  $R_6$ , and  $R_7$  are hydrogen.



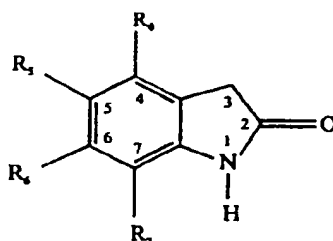
In another aspect, the invention features a method of synthesizing an indolinone compound, where the method comprises the steps of:

- (a) reacting an aldehyde of formula XIV with an  
5 oxindole of formula XV,

XIV



XV

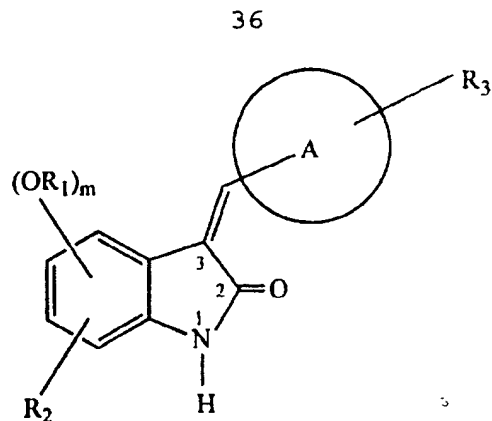


where  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$ , and  $R_{11}$  are as  
10 described herein; and

- (b) separating the indolinone compound from the aldehyde and oxindole reactants.

In another aspect, the invention features an indolinone compound having a substituent at the 3 position  
15 of the oxindole ring, where the substituent at the 3 position of the oxindole ring is selected from the group consisting of five-membered or six-membered heterocyclic rings. The oxindolone is further substituted with groups enhancing hydrosolubility as set forth below.

20 A preferred embodiment of the invention relates to a compound of the following formula:



wherein

(a) A is a five membered heterocyclic ring selected from the following group consisting of thiophene, pyrrole, pyrazole, imidazole, 1,2,3-triazole, 1,2,4-triazole, oxazole, isoxazole, thiazole, isothiazole, furan, 1,2,3-oxadiazole, 1,2,4-oxadiazole, 1,2,5-oxadiazole, 1,3,4-oxadiazole, 1,2,3,4-oxatriazole, 1,2,3,5-oxatriazole, 1,2,3-thiadiazole, 1,2,4-thiadiazole, 1,2,5-thiadiazole, 1,3,4-thiadiazole, 1,2,3,4-thiatriazole, 1,2,3,5-thiatriazole, and tetrazole

(b) m is zero, 1, or 2;

(c) R<sub>1</sub> is hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>2</sub>-C<sub>6</sub> alkanoyl;

(d) one of R<sub>2</sub> and R<sub>3</sub> independently is hydrogen and the other is a substituent selected from:

(1) a C<sub>1</sub>-C<sub>6</sub> alkyl group substituted by 1, 2 or 3 hydroxy groups;

(2) SO<sub>3</sub>R<sub>4</sub> in which R<sub>4</sub> is hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl unsubstituted or substituted by 1, 2 or 3 hydroxy groups;

(3) SO<sub>2</sub>NHR<sub>5</sub> in which R<sub>5</sub> is as R<sub>4</sub> defined above or a -(CH<sub>2</sub>)<sub>n</sub>-N(C<sub>1</sub>-C<sub>6</sub> alkyl)<sub>2</sub> group in which n is 2 or 3;

(4) COOR<sub>6</sub> in which R<sub>6</sub> is C<sub>1</sub>-C<sub>6</sub> alkyl unsubstituted or substituted by phenyl or by 1, 2 or 3 hydroxy groups or phenyl;

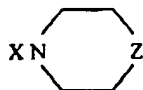
(5)  $\text{CONHR}_7$  in which  $R_7$  is hydrogen, phenyl or  $\text{C}_1$ - $\text{C}_6$  alkyl substituted by 1, 2 or 3 hydroxy groups or by phenyl;

(6)  $\text{NHSO}_2\text{R}_8$  in which  $R_8$  is  $\text{C}_1$ - $\text{C}_6$  alkyl or phenyl  
5 unsubstituted or substituted by halogen or by  $\text{C}_1$ - $\text{C}_4$  alkyl;

(7)  $\text{N}(\text{R}_9)_2$ ,  $\text{NHR}_9$  or  $\text{OR}_9$  wherein  $R_9$  is  $\text{C}_2$ - $\text{C}_6$  alkyl substituted by 1, 2 or 3 hydroxy groups;

(8)  $\text{NHCOR}_{10}$ ,  $\text{OOCR}_{10}$  or  $\text{CH}_2\text{OOCR}_{10}$  in which  $R_{10}$  is  $\text{C}_1$ - $\text{C}_6$  alkyl substituted by 1, 2 or 3 hydroxy groups;

10 (9)  $\text{NHCONH}_2$ ;  $\text{NH}-\text{C}(\text{NH}_2)=\text{NH}$ ;  $\text{C}(\text{NH}_2)=\text{NH}$ ;  
 $\text{CH}_2\text{NHC}(\text{NH}_2)=\text{NH}$ ;  $\text{CH}_2\text{NH}_2$ ;  $\text{OPO}(\text{OH})_2$ ;  $\text{CH}_2\text{OPO}(\text{OH})_2$ ;  $\text{PO}(\text{OH})_2$ ; or a



group wherein X is selected from the group consisting of  $\text{CH}_2$ ,  $\text{SO}_2$ ,  $\text{CO}$ , or  $\text{NHCO}(\text{CH}_2)_p$  in which p is 1, 2, or 3 and Z is  
15  $\text{CH}_2$ , O or  $\text{N}-\text{R}_{11}$  in which  $R_{11}$  is hydrogen or is as  $R_9$  defined above.

The term "alkanoyl" refers to a chemical moiety with formula  $-(\text{R})_n-\text{CO}-\text{R}'$ , where R and  $\text{R}'$  are selected from the group consisting of alkyl or aryl and n is 0 or 1.

20 Inhibitors of protein kinase catalytic activity are known in the art. Small molecule inhibitors typically block the binding of substrates by tightly interacting with the protein kinase active-site. Indolinone compounds, for example, can bind to the active-site of a  
25 protein kinase and inhibit the molecule effectively, as measured by inhibition constants on the order of  $10^{-6}$  M.

A preferred embodiment of the invention relates to an hydrosoluble indolinone compound that inhibits the catalytic activity of a *FLK* protein kinase. The indolinone  
30 preferably inhibits the catalytic activity of the *FLK* protein kinase with an  $\text{IC}_{50}$  less than 50  $\mu\text{M}$ , more prefera-

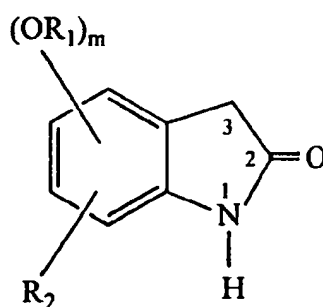
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bly with an  $IC_{50}$  less than 5  $\mu M$ , and most preferably with an  $IC_{50}$  less than 0.5  $\mu M$ .

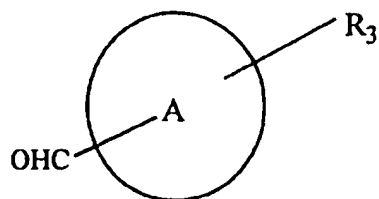
In another aspect, the invention features a method of synthesizing a hydrosoluble indolinone compound, where the  
5 method comprises the steps of:

(a) reacting an aldehyde of formula XVI with an oxindole of formula XVII,

10



XVI



XVII

15

where

(a) A is a five or six membered ring comprised of atoms selected from the group consisting of oxygen, carbon, sulfur and nitrogen  
20

(b) m is zero, 1, or 2;

(c)  $R_1$  is hydrogen,  $C_1-C_6$  alkyl or  $C_2-C_6$  alkanoyl;

(d) one of  $R_2$  and  $R_3$  independently is hydrogen and the other is a substituent selected from:

(1) a  $C_1-C_6$  alkyl group substituted by 1, 2 or 3  
5 hydroxy groups;

(2)  $SO_3R_4$  in which  $R_4$  is hydrogen or  $C_1-C_6$  alkyl unsubstituted or substituted by 1, 2 or 3 hydroxy groups;

(3)  $SO_2NHR_5$  in which  $R_5$  is as  $R_4$  defined above or a  $-(CH_2)_n-N(C_1-C_6 \text{ alkyl})_2$  group in which  $n$  is 2 or 3;

10 (4)  $COOR_6$  in which  $R_6$  is  $C_1-C_6$  alkyl unsubstituted or substituted by phenyl or by 1, 2 or 3 hydroxy groups or phenyl;

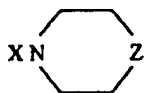
(5)  $CONHR_7$  in which  $R_7$  is hydrogen, phenyl or  $C_1-C_6$  alkyl substituted by 1, 2 or 3 hydroxy groups or by  
15 phenyl;

(6)  $NHSO_2R_8$  in which  $R_8$  is  $C_1-C_6$  alkyl or phenyl unsubstituted or substituted by halogen or by  $C_1-C_4$  alkyl;

(7)  $N(R_9)_2$ ,  $NHR_9$  or  $OR_9$  wherein  $R_9$  is  $C_2-C_6$  alkyl substituted by 1, 2 or 3 hydroxy groups;

20 (8)  $NHCOR_{10}$ ,  $OOCR_{10}$  or  $CH_2OOCR_{10}$  in which  $R_{10}$  is  $C_1-C_6$  alkyl substituted by 1, 2 or 3 hydroxy groups;

(9)  $NHCONH_2$ ;  $NH-C(NH_2)=NH$ ;  $C(NH)=NH$ ;  $CH_2NHC(NH_2)=NH$ ;  $CH_2NH_2$ ;  $OPO(OH)_2$ ;  $CH_2OPO(OH)_2$ ;  $PO(OH)_2$ ; or a



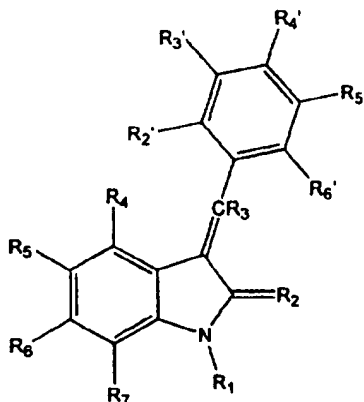
25 group wherein  $X$  is selected from the group consisting of  $CH_2$ ,  $SO_2$ ,  $CO$ , or  $NHCO(CH_2)_p$  in which  $p$  is 1, 2, or 3 and  $Z$  is  $CH_2$ ,  $O$  or  $N-R_{11}$  in which  $R_{11}$  is hydrogen or is as  $R_9$  defined above; and

(b) separating the indolinone compound from the  
30 aldehyde and oxindole reactants.

Another aspect of the invention features a pharmaceutical composition comprising an oxidolinone compound of

the invention and a physiologically acceptable carrier or diluent.

In the embodiments set forth below, several preferred subclasses of compounds having activity against Flk are set forth. Thus, in one embodiment, the invention provides compounds having the formula:



wherein

10  $R_1$  is hydrogen or alkyl (preferably lower alkyl, more preferably methyl);

$R_2$  is oxygen or sulfur;

$R_3$  is hydrogen or methyl;

15  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  are each independently selected from the group consisting of hydrogen (preferably at least two or three of  $R_4$ ,  $R_5$ ,  $R_6$  and  $R_7$  are hydrogen), alkyl (preferably lower alkyl, more preferably methyl), halogen,  $\text{NO}_2$ , and  $\text{NRR}'$ ;

20  $R_2'$ ,  $R_3'$ ,  $R_4'$ ,  $R_5'$ , and  $R_6'$  are each independently selected from the group consisting of hydrogen, alkyl, halogen,  $\text{NO}_2$ ,  $\text{NRR}'$  (where taken together  $\text{NRR}'$  may form a five or six member non-aromatic heterocycle optionally substituted with COH), OH, ORNRR<sup>1</sup>, and OR;

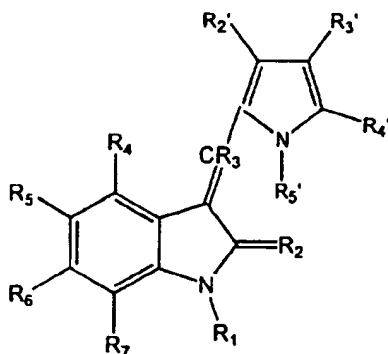
41

R is hydrogen, alkyl or aryl; and

R' is hydrogen, alkyl or aryl.

In another embodiment, the invention provides compounds having the formula:

5



wherein

R<sub>1</sub> is hydrogen or alkyl (preferably lower alkyl, more preferably methyl);

10 R<sub>2</sub> is oxygen or sulfur;

R<sub>3</sub> is hydrogen or methyl;

R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are each independently selected from the group consisting of hydrogen, alkyl (preferably lower alkyl, more preferably methyl), halogen, and NRR';

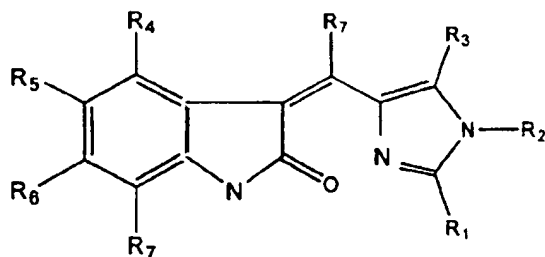
15 R<sub>2</sub>', R<sub>3</sub>', R<sub>4</sub>', and R<sub>5</sub>', are each independently selected from the group consisting of hydrogen, alkyl, halogen, and (alkyl)<sub>n</sub>CO<sub>2</sub>R;

R is hydrogen, alkyl or aryl; and

R' is hydrogen, alkyl or aryl.

20 In another embodiment, the invention provides compounds having the formula:

42



wherein

R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub>, are each independently selected from the group consisting of hydrogen, alkyl, halogen, and (alkyl)<sub>n</sub>CO<sub>2</sub>R;

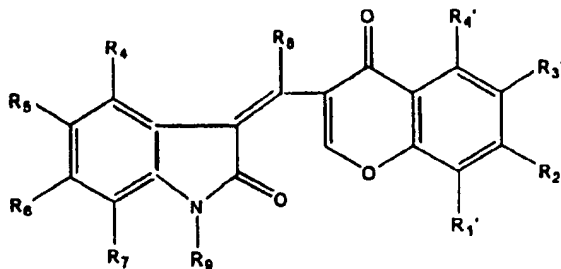
R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are each independently selected from the group consisting of hydrogen, alkyl (preferably lower alkyl, more preferably methyl), halogen, and NRR';

R<sub>8</sub> and R<sub>9</sub> are independently hydrogen or alkyl;

R is hydrogen, alkyl or aryl; and

R' is hydrogen, alkyl or aryl.

In another embodiment, the invention provides compounds having the formula:



15

(XVIII)

wherein

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, and R<sub>7</sub> are each independently selected from the group consisting of hydrogen, alkyl (preferably lower alkyl, more preferably methyl), halogen and NRR';



$R_8$  and  $R_9$  are independently hydrogen or alkyl;

$R$  is hydrogen, alkyl or aryl; and

$R'$  is hydrogen, alkyl or aryl.

In another aspect, the invention features a method of  
5 synthesizing an indolinone compound, where the method  
comprises the steps of:

(a) reacting an appropriate aldehyde with an  
appropriate oxindole,

(b) separating the indolinone compound from the  
10 aldehyde and oxindole reactants.

In another aspect, the invention features an  
indolinone compound, salt, ester, amide, prodrug, isomer,  
or metabolite thereof that modulates the catalytic activ-  
ity of a protein kinase.

15 The term "modulates" refers to the ability of a  
compound to alters the catalytic activity of a protein  
kinase. A modulator preferably activates the catalytic  
activity of a protein kinase, more preferably activates or  
inhibits the catalytic activity of a protein kinase  
20 depending on the concentration of the compound exposed to  
the protein kinase, or most preferably inhibits the  
catalytic activity of a protein kinase.

The term "protein kinase" defines a class of proteins  
that regulate a variety of cellular functions. Protein  
25 kinases regulate cellular functions by reversibly phos-  
phorylating protein substrates which thereby changes the  
conformation of the substrate protein. The conformational  
change modulates catalytic activity of the substrate or  
its ability to interact with other binding partners.

30 The term "catalytic activity", in the context of the  
invention, defines the rate at which a protein kinase  
phosphorylates a substrate. Catalytic activity can be  
measured, for example, by determining the amount of a  
substrate converted to a product as a function of time.

Phosphorylation of a substrate occurs at the active-site of a protein kinase. The active-site is normally a cavity in which the substrate binds to the protein kinase and is phosphorylated.

5       A preferred embodiment of the invention relates to an indolinone compound that inhibits the catalytic activity of a *FLK* protein kinase. The indolinone preferably inhibits the catalytic activity of the *FLK* protein kinase with an  $IC_{50}$  less than 50  $\mu M$ , more preferably with an  $IC_{50}$   
10 less than 5  $\mu M$ , and most preferably with an  $IC_{50}$  less than 0.5  $\mu M$ .

The term "*FLK*" refers to a protein kinase that phosphorylates protein substrates on tyrosine residues. The *FLK* protein kinase regulates cellular functions in  
15 response to the VEGF growth factor. These cellular functions include, but are not limited to, cellular proliferation, and in particular, blood vessel proliferation in tissues.

The term " $IC_{50}$ ", in the context of the invention,  
20 refers to a parameter that describes the concentration of a particular indolinone required to inhibit 50% of the *FLK* protein kinase catalytic activity. The  $IC_{50}$  parameter can be measured using an assay described herein and by varying the concentration of a particular indolinone compound.

25       Another aspect of the invention features a pharmaceutical composition comprising, consisting essentially of, or consisting of an indolinone compound, salt, ester, amide, prodrug, isomer, or metabolite thereof of the invention and a physiologically acceptable carrier or  
30 diluent.

The term "pharmaceutical composition" refers to a mixture of an indolinone compound of the invention with other chemical components, such as diluents or carriers. The pharmaceutical composition facilitates administration

of the compound to an organism. Multiple techniques of administering a compound exist in the art including, but not limited to, oral, injection, aerosol, parenteral, and topical administration. Pharmaceutical compositions can also be obtained by reacting compounds with inorganic acids such as hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, phosphoric acid, methanesulfonic acid, ethanesulfonic acid, *p*-toluenesulfonic acid, salicylic acid and the like.

10       The term "physiologically acceptable" defines a carrier or diluent that does not cause significant irritation to an organism and does not abrogate the biological activity and properties of the compound.

15       The term "carrier" defines a chemical compound that facilitates the incorporation of a compound into cells or tissues. For example dimethyl sulfoxide (DMSO) is a commonly utilized carrier as it facilitates the uptake of many organic compounds into the cells or tissues of an organism.

20       The term "diluent" defines chemical compounds diluted in water that will dissolve the compound of interest as well as stabilize the biologically active form of the compound. Salts dissolved in buffered solutions are utilized as diluents in the art. One commonly used buffered solution is phosphate buffered saline because it mimics the salt conditions of human blood. Since buffer salts can control the pH of a solution at low concentrations, a buffered diluent rarely modifies the biological activity of a compound.

30       Another aspect of the invention features a method of preventing or treating an abnormal condition in an organism. The abnormal condition is associated with an aberration in a signal transduction pathway characterized by an interaction between a protein kinase and a natural binding

partner. The method comprises the following steps: (a) administering a compound of the invention to an organism; and (b) promoting or disrupting the abnormal interaction.

The term "preventing" refers to a method of barring  
5 the organism from acquiring the abnormal condition.

The term "treating" refers to a method of alleviating or abrogating the abnormal condition in the organism.

The term "organism" relates to any living entity comprised of at least one cell. An organism can be as  
10 simple as one eukaryotic cell or as complex as a mammal.

The term "abnormal condition" refers to a function in the cells or tissues of an organism that deviates from their normal functions in that organism. An abnormal condition can relate to cell proliferation, cell differ-  
15 tiation, or cell survival.

Aberrant cell proliferative conditions include cancers such as fibrotic and mesangial disorders, abnormal angiogenesis and vasculogenesis, wound healing, psoriasis, diabetes mellitus, and inflammation.

20 Aberrant differentiation conditions include, but are not limited to neurodegenerative disorders, slow wound healing rates, and tissue grafting techniques.

Aberrant cell survival conditions relate to conditions in which programmed cell death (apoptosis) pathways  
25 are activated or abrogated. A number of protein kinases are associated with the apoptosis pathways. Aberrations in the function of any one of the protein kinases could lead to cell immortality or premature cell death.

Cell proliferation, differentiation, and survival are  
30 phenomena simply measured by methods in the art. These methods can involve observing the number of cells or the appearance of cells under a microscope with respect to time (days).

The term "administering" relates to a method of incorporating a compound into cells or tissues of an organism. The abnormal condition can be prevented or treated when the cells or tissues of the organism exist within the organism or outside of the organism. Cells existing outside the organism can be maintained or grown in cell culture dishes. For cells harbored within the organism, many techniques exist in the art to administer compounds, including (but not limited to) oral, parenteral, dermal, injection, and aerosol applications. For cells outside of the organism, multiple techniques exist in the art to administer the compounds, including (but not limited to) cell microinjection techniques, transformation techniques, and carrier techniques.

The aberrant condition can also be prevented or treated by administering a group of cells having an aberration in a signal transduction process to an organism. The effect of administering a compound on organism function can then be monitored. The art contains multiple methods of introducing a group of cells to an organism as well as methods of administering a compound to an organism. The organism is preferably a frog, more preferably a mouse, rat, rabbit, guinea pig, or goat, and most preferably a monkey or ape.

The term "signal transduction pathway" refers to the molecules that propagate an extracellular signal through the cell membrane to become an intracellular signal. This signal can then stimulate a cellular response. The polypeptide molecules involved in signal transduction processes are typically receptor and non-receptor protein kinases, receptor and non-receptor protein phosphatases, nucleotide exchange factors, and transcription factors.

The term "aberration", in conjunction with a signal transduction process, refers to a protein kinase that is over- or under-expressed in an organism, mutated such that its catalytic activity is lower or higher than wild-type protein kinase activity, mutated such that it can no longer interact with a natural binding partner, is no longer modified by another protein kinase or protein phosphatase, or no longer interacts with a natural binding partner.

10       The term "natural binding partner" refers to a polypeptide that normally binds to the intracellular region of a protein kinase in a cell. These natural binding partners can play a role in propagating a signal in a protein kinase signal transduction process. The  
15       natural binding partner can bind to a protein kinase intracellular region with high affinity. High affinity represents an equilibrium binding constant on the order of  $10^{-6}$  M or less. However, a natural binding partner can also transiently interact with a protein kinase intracel-  
20       lular region and chemically modify it. Protein kinase natural binding partners are chosen from a group consisting of, but not limited to, src homology 2 (SH2) or 3 (SH3) domains, other phosphoryl tyrosine binding (PTB) domains, and other protein kinases or protein  
25       phosphatases.

      The term "promoting or disrupting the abnormal interaction" refers to a method that can be accomplished by administering a compound of the invention to cells or tissues in an organism. A compound can promote an inter-  
30       action between a protein kinase and natural binding partners by forming favorable interactions with multiple amino acids at the complex interface. Alternatively, a compound can inhibit an interaction between a protein kinase and natural binding partners by compromising

favorable interactions formed between amino acids at the complex interface.

A preferred embodiment of the invention relates to the method of treating an abnormal condition in an organism, where the organism is a mammal.

The term "mammal" refers preferably to such organisms as mice, rats, rabbits, guinea pigs, and goats, more preferably to monkeys and apes, and most preferably to humans.

Another preferred embodiment of the invention relates to a method of treating or preventing an abnormal condition associated with the *FLK* protein kinase.

Another preferred embodiment of the invention relates to an indolinone compound that inhibits the catalytic activity of a platelet derived growth factor protein kinase. The indolinone preferably inhibits the catalytic activity of the platelet derived growth factor protein kinase with an  $IC_{50}$  less than 50  $\mu M$ , more preferably with an  $IC_{50}$  less than 5  $\mu M$ , and most preferably with an  $IC_{50}$  less than 0.5  $\mu M$ .

The term "platelet derived growth factor" refers to a protein kinase that phosphorylates substrates on tyrosine residues. The platelet derived growth factor protein kinase regulates cellular functions in response to the PDGF growth factor. These cellular functions include, but are not limited to, cellular proliferation.

The chemical formulae referred herein may exhibit the phenomena of tautomerism or structural isomerism. For example, the compounds described herein may be adopt a *cis* or *trans* conformation about the double bond connecting the indolinone 3-substituent to the indolinone ring, or may be mixtures of *cis* and *trans* isomers. As the formulae drawing within this specification can only represent one possible tautomeric or structural isomeric form, it should

be understood that the invention encompasses any tautomeric or structural isomeric form, or mixtures thereof, which possesses the ability to regulate, inhibit and/or modulate tyrosine kinase signal transduction or cell proliferation and is not limited to any one tautomeric or structural isomeric form utilized within the formulae drawing.

In addition to the above-described compounds, the invention is further directed, where applicable, to solvated as well as unsolvated forms of the compounds (e.g. hydrated forms) having the ability to regulate and/or modulate cell proliferation.

The compounds described herein may be prepared by any process known to be applicable to the preparation of chemically-related compounds. Suitable processes are illustrated in the examples. Necessary starting materials may be obtained by standard procedures of organic chemistry.

An individual compound's relevant activity and efficacy as an agent to affect receptor tyrosine kinase mediated signal transduction may be determined using available techniques. Preferentially, a compound is subjected to a series of screens to determine the compound's ability to modulate, regulate and/or inhibit cell proliferation. These screens, in the order in which they are conducted, include biochemical assays, cell growth assays and *in vivo* experiments.

The summary of the invention described above is not limiting and other features and advantages of the invention will be apparent from the following detailed description of the invention, and from the claims.

#### Brief Description of the Drawings and Tables

Figure 1 shows illustrative type A oxindoles.



Figure 2 shows illustrative type B aldehydes.

Table 1 depicts examples of compounds of the invention. The table illustrates the molecular structure of each indolinone, the molecular weight of the compound, and  
5 the chemical formula of the compound.

Table 2 depicts the biological activity of select compounds of the invention. Listed are the chemical structure of the compound with  $IC_{50}$  values measured in *FLK-1* biological inhibition assays.

10 Table 3 shows preferred indole based aldehydes that can be used in the present invention.

Table 4 shows preferred oxindoles that can be used in the present invention.

Table 5 depicts examples of compounds of the invention. The table illustrates the molecular structure of each indolinone, the molecular weight of the compound, and  
15 the chemical formula of the compound.

Tables 6 and 7 depicts the biological activity of select compounds of the invention. Listed are the chemical structure of the compound with  $IC_{50}$  values measured in  
20 *FLK-1* and platelet derived growth factor protein kinase (PDGFR) biological inhibition assays.

Table 8 depicts examples of compounds of the invention. The table illustrates the molecular structure of exemplary indolinones and the biological activity of  
25 select compounds of the invention. Listed are the chemical structure of the compound with  $IC_{50}$  values measured in *FLK-1* biological inhibition assays.

Table 9 lists exemplary compounds of the invention.

30 Table 10 shows *FLK* activity data for illustrative compounds of the invention.

Table 11 shows type A oxindols.

Table 12 shows type B aldehydes.

Table 13 shows the names of several indolinone compounds of the present invention.

Table 14 shows kinase data for the compounds listed in Table 13 as determined using the assays described  
5 herein.

#### Detailed Description of the Invention

The invention is directed in part towards designing protein kinase inhibitors that obliterate tumors  
10 by severing their sources of sustenance. The inhibitors are designed to specifically bind protein kinases over-expressed in the vasculature that supply tumors with sustenance. One such protein kinase target is *FLK-1*, which is over-expressed in the proliferating endothelial  
15 cells of a growing tumor, but not in the surrounding quiescent endothelial cells. Plate et al., 1992, *Nature* 359:845-848.

*FLK-1* is activated upon binding VEGF, a strong regulator for endothelial cell proliferation as well as  
20 normal and pathological angiogenesis. Klagsburn and Soker, 1993, *Current Biology* 3:699-702. Thus, compounds that specifically inhibit the *FLK* protein kinase are potential anti-cancer agents as they may decrease the vasculature that nourishes tumors. These inhibitors will  
25 most likely result in minimizing and even obliterating solid tumors. In addition, compounds that specifically inhibit *FLK* will potentially represent a new generation of cancer therapeutics as they will most likely cause few side effects. These potential properties are a welcome  
30 improvement over the currently utilized cancer therapeutics that cause multiple side effects and deleteriously weaken patients.

### Synthesis of Indolinone Compounds

The indolinone compounds of the invention are synthesized by reacting an aldehyde with an oxindol as shown in the examples provided herein. Descriptions of methods for synthesizing indolinone compounds are provided in the examples described herein. The examples fully describe the solvents, temperatures, separation techniques, and other conditions utilized for the invention. Other synthetic techniques, such as those described in International patent publications WO 96/22976, published August 1, 1996 by Ballinari et al., and WO 96/40116, published December 19, 1996 by Tang et al. may also be used or adapted by those skilled in the art to make the compounds of the present invention. Descriptions of the methods used to specifically synthesize the indolinone compounds of the invention, are disclosed herein.

### Biological Activity of Indolinone Compounds

Indolinone compounds of the invention can be tested for their ability to activate or inhibit protein kinases in biological assays. The methods used to measure indolinone modulation of protein kinase function are described herein. Indolinone compounds of the invention were tested for their ability to inhibit the *FLK* protein kinase. The biological assay and results of these inhibition studies are reported herein.

### Target Diseases to be Treated by Indolinone Compounds

Protein kinases are essential regulatory molecules that control a variety of cellular functions. For this reason, any alteration in the function of a protein kinase can cause an abnormal condition in an organism. One of the many functions controlled by protein kinases is cell proliferation.

Alterations in the function of a protein kinase that normally regulates cell proliferation can lead to enhanced or decreased cell proliferative conditions evident in certain diseases. Aberrant cell proliferative conditions  
5 include cancers such as fibrotic and mesangial disorders, abnormal angiogenesis and vasculogenesis, wound healing, psoriasis, restenosis, diabetes mellitus, and inflammation.

Fibrotic disorders and mesangial cell proliferative  
10 disorders are described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

Angiogenic and vasculogenic disorders result from excess proliferation of blood vessels. Blood vessel  
15 proliferation is necessary in a variety of normal physiological processes such as embryonic development, corpus luteum formation, wound healing and organ regeneration. However, blood vessel proliferation is also essential in cancer tumor development. Other examples of blood vessel  
20 proliferative disorders include arthritis, where new capillary blood vessels invade the joint and destroy cartilage. In addition, blood vessel proliferative diseases include ocular diseases, such as diabetic retinopathy, where new capillaries in the retina invade the  
25 vitreous, bleed and cause blindness. Conversely, disorders related to the shrinkage, contraction or closing of blood vessels, such as restenosis, are also implicated in adverse regulation of RPKs or RPPs.

Moreover, vasculogenesis and angiogenesis are associated with the growth of malignant solid tumors and metastasis. A vigorously growing cancer tumor requires a nutrient and oxygen rich blood supply to continue growing. As a consequence, an abnormally large number of capillary blood vessels often grow in concert with the tumor and act

as supply lines to the tumor. In addition to supplying nutrients to the tumor, the new blood vessels embedded in a tumor provide a gateway for tumor cells to enter the circulation and metastasize to distant sites in the organism. Folkman, 1990, *J. Natl. Cancer Inst.* 82:4-6.

Angiogenic and vasculogenic disorders are closely linked to the *FLK* protein kinase. *FLK-1* is activated upon binding VEGF, a strong regulator for endothelial cell proliferation as well as normal and pathological angiogenesis. Klagsburn and Soker, 1993, *Current Biology* 3:699-702. Thus, compounds that specifically inhibit the *FLK* protein kinase are potential anti-cancer agents as they may decrease the vasculature that nourishes tumors. These inhibitors will most likely result in minimizing and even obliterating solid tumors. In addition, compounds that specifically inhibit *FLK* will potentially represent a new generation of cancer therapeutics as they will most likely cause few side effects. These potential properties are a significant improvement over the currently utilized cancer therapeutics that cause multiple side effects and deleteriously weaken patients.

In addition to cell proliferation, some RPKs and RPPs regulate the penultimate cellular functions, cell survival and cell death. Glial derived growth factor (GDNF) activates *c-ret*, for example, by bringing multiple *c-ret* receptors together into close proximity and promoting cross phosphorylation of the intracellular regions. Signal transduction molecules that form a complex with *c-ret* as a result of these phosphoryl moieties, such as *grb-2*, *sos*, *ras*, and *raf*, propagate a signal in the cell that promotes neural survival. Thus, compounds that promote the interactions of these stimulatory molecules of *c-ret* would enhance the activity of *c-ret*. Alternatively, protein phosphatases can remove the phosphoryl moieties

placed on the intracellular region of c-ret in response to GDNF, and thus inhibit the signaling capability of c-ret. Thus compounds that inhibit phosphatases of c-ret will enhance the signaling capacity of c-ret. In the context  
5 of the present invention, the c-ret protein kinase could be activated by indolinone compounds that are modified with substituents, particularly at the 5 position of the oxindole ring.

c-ret is implicated in the development and survival  
10 of enteric, synaptic, and sensory neurons and neurons of the renal system upon stimulation by GDNF. Lack of function mutations in c-ret can lead to Hirschsprung's disease, for example, which manifests itself as a decrease in intestinal tract innervation in patients. Thus,  
15 compounds that activate c-ret are potential therapeutic agents for the treatment of neurodegenerative disorders, including, but not limited to, Hirschsprung's disease, Parkinson's disease, Alzheimer's disease, and amyotrophic lateral sclerosis. Compounds that inhibit c-ret function  
20 are possible anti-cancer agents as over-expression of ret in cells is implicated in cancers, such as cancer of the thyroid.

#### Pharmaceutical Compositions and Administration of Indolinone Compounds 25

Methods of preparing pharmaceutical formulations of the compounds, methods of determining the amounts of compounds to be administered to a patient, and modes of administering compounds to an organism are disclosed in  
30 International Patent Publication No. WO 96/22976, published August 1, 1996 by Ballinari et al., which is incorporated herein by reference in its entirety, including any drawings. Those skilled in the art will appreciate that such descriptions are applicable to the present

invention and can be easily adapted to it. The mechanism of such action and possible uses for such compounds are described in International Patent Publication WO 96/40116, published December 19, 1996 by Tang et al.

5       The compounds described herein can be administered to a human patient per se, or in pharmaceutical compositions where it is mixed with suitable carriers or excipient(s). Techniques for formulation and administration of the compounds of the instant application may be found in  
10 "Remington's Pharmaceutical Sciences," Mack Publishing Co., Easton, PA, latest edition or in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

15   Effective Dosage

Pharmaceutical compositions suitable for use in the present invention include compositions wherein the active ingredients are contained in an amount effective to achieve its intended purpose. More specifically, a  
20 therapeutically effective amount means an amount of compound effective to prevent, alleviate or ameliorate symptoms of disease or prolong the survival of the subject being treated. Determination of a therapeutically effective amount is well within the capability of those skilled  
25 in the art, especially in light of the detailed disclosure provided herein and in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

30   Packaging

The compositions may, if desired, be presented in a pack or dispenser device which may contain one or more unit dosage forms containing the active ingredient according to the description provided in International Patent

Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

### Examples

5       The examples below are not limiting and are merely representative of various aspects and features of the present invention. The examples demonstrate methods of synthesizing indolinone compounds of the invention. The examples also demonstrate the specificity as well as the  
10       potency with which these compounds inhibit protein kinase function in cells.

#### Example 1: Compound Synthesis

15       The compounds of the present invention may be synthesized according to known techniques such as those described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al. The following represent preferred methods for synthesizing the  
20       compounds of the claimed invention.

(a) Preparation of 4-Methyl-2-oxindole. Diethyl oxalate (30 mL) in 20 mL of dry ether was added with stirring to 19 g of potassium ethoxide suspended in 50 mL  
25       of dry ether. The mixture was cooled in an ice bath and 20 mL of 3-nitro-o-xylene in 20 mL of dry ether was slowly added. The thick dark red mixture was heated to reflux for 0.5 hr, concentrated to a dark red solid, and treated with 10% sodium hydroxide until almost all of the solid  
30       dissolved. The dark red mixture was treated with 30% hydrogen peroxide until the red color changed to yellow. The mixture was treated alternatively with 10% sodium hydroxide and 30% hydrogen peroxide until the dark color was no longer present. The solid was filtered off and the



filtrate acidified with 6N hydrochloric acid. The resulting precipitate was collected by vacuum filtration, washed with water, and dried under vacuum to give 9.8 g (45% yield) of 1-methyl-6-nitrophenylacetic acid as an off-white solid. The solid was hydrogenated in methanol over 10% palladium on carbon to give 9.04 g of the title compound as a white solid.

(b) Preparation of 5-Nitro-2-oxindole. The 2-oxindole (6.5 g) was dissolved in 25 mL of concentrated sulfuric acid and the mixture maintained at -10 -15 °C while 2.1 mL of fuming nitric acid was added dropwise. After the addition of the nitric acid the reaction mixture was stirred at 0°C for 0.5 hr and poured into ice water. The precipitate was collected by filtration, washed with water and crystallized from 50% of the acetic acid. The final crystal was then filtered, washed with water and dried under vacuum to give 6.3g (70%) of 5-nitro-2-oxindole.

20

(c) Preparation of 5-Amino-2-oxindole. The 5-nitro-2-oxindole (6.3 g) was hydrogenated in methanol over 10% palladium on carbon to give 3.0 g (60% yield) of the title compound as a white solid.

25

(d) Preparation of 5-Fluoro-2-oxindole. 5-Fluoroisatin (8.2 g) was dissolved in 50 mL of hydrazine hydrate and refluxed for 1 hr. The reaction mixtures were then poured in ice water. The precipitate was then filtered, washed with water and dried under vacuum oven to give 6.0 g of 5-fluoro-2-oxindole (79% yield).

(e) Preparation of 5-Bromo-2-oxindole. 2-Oxindole (1.3 g) in 20 mL of acetonitrile was cooled to -10°C and

2.0 g of N-bromosuccinimide was slowly added with stirring. The reaction was stirred for 1 hour at -10°C and 2 hours at 0°C. The precipitate was collected, washed with water and dried to give 1.9 g (90% yield) of the title compound.

(f) Preparation 5-Carboxy-2-oxindole

Step 1. Synthesis of 5-Methoxycarbonyl-2-oxindole. 5-Iodo-2-oxindole (17g) was refluxed with 2g of palladium diacetate, 18.15g of triethylamine, 150 mL of methanol, 15 mL of dimethylsulfoxide and 2.6 g of DPPP in an atmosphere saturated with carbon monoxide. After 24 hours, the reaction was filtered to remove the catalyst and the filtrate concentrated. The concentrate was chromatographed on a silica gel in 30% ethyl acetate in hexane. The fractions containing product were concentrated and allowed to stand. The precipitated product was collected by vacuum filtration to give 0.8g (7%) of the title compound as an off-white solid.

Step 2: Synthesis of 5-Carboxy-2-oxindole. 5-Methoxycarbonyl-2-oxindole (1g) and 1g of sodium hydroxide in 20 mL of methanol was refluxed for 3 hours. The reaction mixture was cooled and concentrated to dryness. The residue was dissolved in water and extracted twice with ethyl acetate. The aqueous layer was acidified with 6 N hydrochloric acid and the precipitated solid collected, washed with water, and dried to give 0.7g (78%) of the title compound as an off-white solid.

(g) Preparation of 5-Carboxyethyl-2-oxindole

Step 1: Synthesis of 5-Chloroacetyl-2-oxindole. Aluminum chloride (30.8 g) and 2-oxindole (5.0g) were added to 200 ml of carbon disulfide at room temperature and the mixture stirred. Chloroacetyl chlo-

ride (3.8 mL) was added and the stirring continued for 1 hour. The mixture was heated to reflux for 3 hours, cooled and the solvent decanted. The residue was stirred in ice water until it became a solid suspension. The  
5 solid was collected by vacuum filtration, washed in water, and dried to give 7.0g (90% yield) of the title compound.

Step 2: Synthesis of 5-Chloroethyl-2-oxindole. 5-Chloroacetyl-2-oxindole (7.0g) was added to 25 mL of trifluoroacetic acid and the mixture cooled in an ice bath  
10 with stirring. Triethylsilane (12.3 mL) was added dropwise over 2 minutes. The reaction was then stirred at room temperature for 4 hours and poured into ice water. Hexane was added, the mixture stirred vigorously, and the solid collected by vacuum siltation and washed with hexane  
15 to give 5.9g (91% yield) of the product as a white solid.

Step 3: Synthesis of 5-Cyanoethyl-2-oxindole. Potassium cyanide (2.02 g) was added to 15 mL of dimethylsulfoxide and heated to 90°C 5-Chloroethyl-2-oxindole (3.0 g) dissolved in 5mL of dimethylsulfoxide was  
20 added slowly with stirring, and the reaction heated to 150°C for 2 hours. The mixture was cooled, poured into ice water and the precipitate collected by vacuum filtration, washed with water, and dried to give crude product. The crude material was chromatographed on silica gel in 5%  
25 methanol in chloroform to give 1.2g (42% yield) of the title compound.

Step 4: Synthesis of 5-Carboxyethyl-2-oxindole. 5-Cyanoethyl-2-oxindole (4.02g) in 10mL of water containing 25mL of concentrated hydrochloric acid  
30 was refluxed for 4 hours. The mixture was cooled, water added and the resulting solid collected by vacuum filtration, washed with water and dried to give 1.9g (44% yield) of the title compound as a yellow solid.

(h) Preparation of 3,5-Dimethylpyrrol-2-carboxaldehyde

5-Cyanoethyl-2-oxindole (4.02g) in 10 mL of water containing 25mL of concentrated hydrochloric acid was refluxed for 4 hours. The mixture was cooled, water added and the resulting solid collected by vacuum filtration, washed with water and dried to give 1.9g (44% yield) of the title compound as a yellow solid.

10 (i) Preparation of 3,5-Dimethylpyrrol-2-carboxaldehyde

To a solution dimethylformamide (80.4g) and 1L of dichloroethane at 0°C was added phosphorous oxychloride (153.3g) over a few minutes and the reaction stirred for 1-2 hr at 0°C 2,4-Dimethylpyrrole (114.6g) was added dropwise to the above solution at temperature below 5°C. After the addition was complete the reaction was heated and the aqueous layer isolated and saved. The organic layer was extracted again with 300mL of water and the two aqueous layers combined. The aqueous phase was extracted with 200mL of dichloroethane and the organic layer discarded. The aqueous phase was cooled to 10°C and adjusted to pH 10 with 10% sodium hydroxide. The mixture was stirred at 10°C for 2hr. The yellow solid was collected by vacuum filtration and washed thoroughly with water. The solid was dried at room temperature under vacuum to give 110.8g (90% yield of 2,4-dimethyl-5-formylpyrrole.

(j) Preparation of 3,5-Diethylpyrrol-2-carboxaldehyde:

The solution of 25.0g of 3,5-heptanedione and 42.3g of diethyl aminomalonate hydrochloride in 200 mL of acetic acid was heated to 95- 10°C for 1.25 hr. Sodium acetate was added and the reaction mixture was stirred for 5.35 hr

and cooled down for 4 hr. The salt was filtered and washed with acetic acid. The acetic acid solution was then concentrated and the residue poured into 800 mL of water. The yellow solid was filtered and dried in a vacuum oven overnight to give 36.0g of ethyl 3,5-diethylpyrrol-2-carboxalate as the orange liquid (92% yield).

Decarboxylation of ethyl 3,5-diethylpyrro-2-carboxalate upon hydrolysis gave 2,4-diethylpyrrole. The title compound was then synthesized via Vilsmeier formulation of 2,4-diethylpyrrole with the same condition used for the preparation of 3,5-dimethylpyrrol-5-carboxaldehyde.

(k) Preparation of 3,5-Diisopropylpyrrol-2-carboxaldehyde

The procedure was the same as the one for the preparation of 3,5-diethylpyrrol-2-carboxaldehyde except starting with 2,6-dimethyl-3,5-heptanedione.

Example 2: FLK Inhibition by Indolinone compounds of the Invention

An enzyme linked immunosorbent assay (ELISA) was conducted to measure the catalytic activity of the FLK-1 receptor and more specifically, the inhibition or activation of indolinone compounds on the catalytic activity of the FLK-1 receptor. Specifically, the following assay was conducted to measure catalytic activity of the FLK-1 receptor in FLK-1/NIH3T3 cells.

The materials and protocol for the FLK-1 ELISA assay are as described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

Selected compounds were tested in the FLK-1 ELISA assay. IC50 measurements are reported in the tables. Derivatives of 3-[(indole-3-yl)methylene]-2-indolinone

compounds with a methyl substituent at the 1' position proved to be the most potent inhibitors of the group of compounds tested in the assay.

5 Example 3: In Vitro RTK Assays

The following *in vitro* assays may be used to determine the level of activity and effect of the different compounds of the present invention on one or more of the RTKs. Similar assays can be designed along the same lines  
10 for any tyrosine kinase using techniques well known in the art.

(a) Enzyme Linked Immunosorbent Assay (ELISA)

Enzyme linked immunosorbent assays (ELISA) may be  
15 used to detect and measure the presence of tyrosine kinase activity. The ELISA may be conducted according to known protocols which are described in, for example, Voller, et al., 1980, "Enzyme-Linked Immunosorbent Assay," In: *Manual of Clinical Immunology*, 2d ed., edited by Rose and Friedman,  
20 man, pp 359-371 Am. Soc. Of Microbiology, Washington, D.C.

The disclosed protocol may be adapted for determining activity with respect to a specific RTK. For example, the preferred protocols for conducting the ELISA experiments  
25 for specific RTKs is provided below. Adaptation of these protocols for determining a compound's activity for other members of the RTK family, as well as other receptor and non-receptor tyrosine kinases, are within the scope of those in the art.

30

(i) FLK-1 ELISA

An ELISA assay was conducted to measure the kinase activity of the FLK-1 receptor and more specifically, the inhibition or activation of protein tyrosine kinase

activity on the FLK-1 receptor. Specifically, the following assay was conducted to measure kinase activity of the FLK-1 receptor in FLK-1/NIH3T3 cells.

## 5 **Materials And Methods.**

**Materials.** The following reagents and supplies were used:

- a. Corning 96-well ELISA plates (Corning Catalog No. 25805-96);
- b. Cappel goat anti-rabbit IgG (catalog no. 55641);
- c. PBS (Gibco Catalog No. 450-1300EB);
- d. TBSW Buffer (50 mM Tris (pH 7.2), 150 mM NaCl and 0.1% Tween-20);
- e. Ethanolamine stock (10% ethanolamine (pH 7.0), stored at 4°C);
- f. HNTG buffer (20mM HEPES buffer (pH 7.5), 150mM NaCl, 0.2% Triton X-100, and 10% glycerol);
- g. EDTA (0.5 M (pH 7.0) as a 100X stock);
- h. Sodium ortho vanadate (0.5 M as a 100X stock);
- i. Sodium pyro phosphate (0.2M as a 100X stock);
- j. NUNC 96 well V bottom polypropylene plates (Applied Scientific Catalog No. AS-72092);
- k. NIH3T3 C7#3 Cells (FLK-1 expressing cells);

- l. DMEM with 1X high glucose L Glutamine (catalog No. 11965-050);
- m. FBS, Gibco (catalog no. 16000-028);
- 5 n. L-glutamine, Gibco (catalog no. 25030-016);
- o. VEGF, PeproTech, Inc. (catalog no. 100-20) (kept as 1 µg/100 µl stock in Milli-Q dH<sub>2</sub>O and stored at -20°C;
- 10 p. Affinity purified anti-FLK-1 antiserum which can be obtained or purified as follows:
  - 15 1. Prepare a Tresyl-Activated Agarose/Flk-1-D column by incubating 10 ml of Tresyl-Activated Agarose with 20 mg of purified GST-Flk-1-D fusion protein in 100mM sodium bicarbonate (pH 9.6) buffer overnight at 4°C.
  - 20 2. Wash the column once with PBS.
  3. Block the excess sites on the column with 2 M glycine for 2 hours at 4°C.
  4. Wash the column with PBS.
  - 25 5. Incubate the column with Rabbit anti-Flk-1D production bleed for 2 hours at 4°C.
  6. Wash the column with PBS.
  7. Elute antiserum with 100 mM Citric Acid, pH3.0 and neutralize the eluate immediately with 2 M Tris, pH 9.0.
  - 30 8. Dialyze the eluate against PBS overnight at 4°C with 3 changes of buffer (sample to buffer ratio is 1:100).



9. Adjust the dialyzed antiserum to 5% glycerol and store at -80°C in small aliquotes.

- 5        q.    UB40 monoclonal antibody specific for phosphotyrosine, (see, Fendley, et al., 1990, *Cancer Research* 50:1550-1558);
- 10       r.    EIA grade Goat anti-mouse IgG-POD (BioRad catalog no. 172-1011);
- 15       s.    2,2-azino-bis(3-ethylbenz-thiazoline-6-sulfonic acid (ABTS) solution (100mM citric acid (anhydrous), 250 mM Na<sub>2</sub>HPO<sub>4</sub> (pH 4.0), 0.5 mg/ml ABTS (Sigma catalog no. A-1888)), solution should be stored in dark at 4°C until ready for use;
- 20       t.    H<sub>2</sub>O<sub>2</sub> (30% solution) (Fisher catalog no. H325);
- 25       u.    ABTS/H<sub>2</sub>O<sub>2</sub> (15ml ABTS solution, 2 µl H<sub>2</sub>O<sub>2</sub>) prepared 5 minutes before use and left at room temperature;
- v.    0.2 M HCl stock in H<sub>2</sub>O;
- w.    dimethylsulfoxide (100%) (Sigma Catalog No. D-8418); and

30       x.    Trypsin-EDTA (Gibco BRL Catalog No. 25200-049).

**Protocol.** The following protocol was used for conducting the assay:

1. Coat Corning 96-well elisa plates with 1.0µg per well Cappel Anti-rabbit IgG antibody in 0.1M Na<sub>2</sub>CO<sub>3</sub> pH 9.6. Bring final volume to 150 µl per well. Coat plates

overnight at 4°C. Plates can be kept up to two weeks when stored at 4°C.

2. Grow cells in Growth media (DMEM, supplemental with 2.0mM L-Glutamine, 10% FBS) in suitable culture dishes until confluent at 37°C, 5% CO<sub>2</sub>.

3. Harvest cells by trypsinization and seed in Corning 25850 polystyrene 96-well roundbottom cell plates, 25,000 cells/well in 200µl of growth media.

4. Grow cells at least one day at 37°C, 5% CO<sub>2</sub>.

10 5. Wash cells with D-PBS 1X.

6. Add 200µl/well of starvation media (DMEM, 2.0mM l-Glutamine, 0.1% FBS). Incubate overnight at 37°C, 5% CO<sub>2</sub>.

7. Dilute Compounds/Extracts 1:20 in polypropylene 96 well plates using starvation media. Dilute dimethylsulfoxide 1:20 for use in control wells.

8. Remove starvation media from 96 well cell culture plates and add 162 µl of fresh starvation media to each well.

20 9. Add 18µl of 1:20 diluted Compound/Extract dilution (from step 7) to each well plus the 1:20 dimethylsulfoxide dilution to the control wells (+/- VEGF), for a final dilution of 1:200 after cell stimulation. Final dimethylsulfoxide is 0.5 %. Incubate the plate at 37°C, 5% CO<sub>2</sub> for two hours.

10. Remove unbound antibody from ELISA plates by inverting plate to remove liquid. Wash 3 times with TBSW + 0.5% ethanolamine, pH 7.0. Pat the plate on a paper towel to remove excess liquid and bubbles.

30 11. Block plates with TBSW + 0.5% Ethanolamine, pH 7.0, 150 µl per well. Incubate plate thirty minutes while shaking on a microtiter plate shaker.

12. Wash plate 3 times as described in step 10.

13. Add 0.5µg/well affinity purified anti-FLU-1 polyclonal rabbit antiserum. Bring final volume to 150µl/well with TBSW + 0.5% ethanolamine pH 7.0. Incubate plate for thirty minutes while shaking.

5        14. Add 180 µl starvation medium to the cells and stimulate cells with 20µl/well 10.0mM sodium ortho vanadate and 500 ng/ml VEGF (resulting in a final concentration of 1.0mM sodium ortho vanadate and 50ng/ml VEGF per well) for eight minutes at 37°C, 5% CO<sub>2</sub>. Negative control  
10 wells receive only starvation medium.

15. After eight minutes, media should be removed from the cells and washed one time with 200µl/well PBS.

16. Lyse cells in 150µl/well HNTG while shaking at room temperature for five minutes. HNTG formulation  
15 includes sodium ortho vanadate, sodium pyro phosphate and EDTA.

17. Wash ELISA plate three times as described in step 10.

18. Transfer cell lysates from the cell plate to  
20 elisa plate and incubate while shaking for two hours. To transfer cell lysate pipette up and down while scrapping the wells.

19. Wash plate three times as described in step 10.

20. Incubate ELISA plate with 0.02µg/well UB40 in  
25 TBSW + 05% ethanolamine. Bring final volume to 150µl/well. Incubate while shaking for 30 minutes.

21. Wash plate three times as described in step 10.

22. Incubate ELISA plate with 1:10,000 diluted EIA grade goat anti-mouse IgG conjugated horseradish peroxidase in TBSW + 0.5% ethanolamine, pH 7.0. Bring final  
30 volume to 150µl/well. Incubate while shaking for thirty minutes.

23. Wash plate as described in step 10.

24. Add 100  $\mu$ l of ABTS/H<sub>2</sub>O<sub>2</sub> solution to well. Incubate ten minutes while shaking.

25. Add 100  $\mu$ l of 0.2 M HCl for 0.1 M HCl final to stop the color development reaction. Shake 1 minute at room temperature. Remove bubbles with slow stream of air and read the ELISA plate in an ELISA plate reader at 410 nm.

(ii) HER-2 ELISA

HER-2 ELISA assays are described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

(iii) PDGF-R ELISA

A PDGF-R ELISA is described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

(iv) IGF-I ELISA

The IGF-I ELISA protocol described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al. may be used to measure phosphotyrosine level on IGF-I receptor, which indicates IGF-I receptor tyrosine kinase activity.

25 (v) EGF Receptor ELISA

EGF Receptor kinase activity (EGFR-NIH3T3 assay) in whole cells was measured as described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

30

(vi) Cellular Insulin Receptor ELISA

The protocol described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al. was used to determine whether the compounds

of the present invention possessed insulin receptor tyrosine kinase activity.

(vii) EGFR ELISA ASSAY

5 Purpose

To provide a consistent method for measuring the in vitro kinase activity of the EGFR in an Enzyme-linked immunosorbent assay (Elisa).

10 Scope. The following protocol describes the procedures used to analyze protein tyrosine kinase activity on the EGFR in an Elisa. The procedure also describes the protocol for the initial screening of drugs for inhibition or activation of protein tyrosine kinase activity.

Reagents and Supplies.

- 15 1. Corning 96-well Elisa plates  
Corning Catalog #25805-96
2. 05-101 monoclonal anti-EGFR antibody (commercially available from UB1)  
-80° C, 1 ml aliquots
- 20 3. PBS (Dulbecco's Phosphate-Buffered Saline)  
Gibco Catalog # 450-1300EB  
Formulation: 2.7 mM KCL  
1.1 mM KH<sub>2</sub>PO<sub>4</sub>  
0.5 mM MgCl<sub>2</sub> (anhydrous)  
25 138 mM NaCl  
8.1 mM Na<sub>2</sub>HPO<sub>4</sub>
4. TBST Buffer  
Formulation: 50 mM Tris pH 7.2  
150 mM NaCl  
30 0.1% Triton X-100
5. Blocking Buffer  
Formulation: 5% Carnation Instant Milk in PBS
6. A431 cell lysate

A431 cells are available from a variety of commercial sources and may be used lysed using conventional methods known to those skilled in the art or as described for lysis of the 3T3 cells in the EGF cellular assay described herein. -80° C, 1 ml aliquots

7. TBS Buffer

Formulation: 50 mM Tris pH 7.2

150 mM NaCl

8. TBS + 10% DMSO

10 Formulation: 10% DMSO in TBS Buffer

(DMSO from Sigma, Catalog # D-2650)

9. ATP/MnCl<sub>2</sub> phosphorylation mix

Formulation: 0.03 mM ATP

(Adenosine-5'-triphosphate, Sigma Catalog #A-5394)

50 mM MnCl<sub>2</sub>

Make fresh in autoclaved Milli-Q H<sub>2</sub>O immediately before use

Keep on ice until use

20 10. NUNC 96-well V bottom polypropylene plates

Applied Scientific Catalog # AS-72092

11. EDTA

Formulation: 200 mM EDTA pH 8.0

25 12. Rabbit polyclonal anti-phosphotyrosine serum or UB40 monoclonal antibody specific for phosphotyrosine or UBI's mab 4610, Upstate Biotechnology, Lake Placid, New York, Catalog # 05-321

- 80° C, 1 ml aliquots

30 Thaw 1 ml vial and aliquot in smaller volumes to store at - 80° C

Antiserum is stable for weeks when thawed and stored at 4 C

13. Goat anti-rabbit IgG peroxidase conjugate

Biosource Catalog # ALI0404

## 14. ABTS Solution

Formulation: 100 mM Citric Acid (anhydrous)  
250 mM Na<sub>2</sub>HPO<sub>4</sub> pH 4.0  
0.5 mg/ml ABTS

5 (2,2'-azino-bis(3-ethylbenzthiazoline-6-sulfonic  
acid)

(Sigma Catalog # A-1888)

Keep solution in dark at 4 C until ready to use

## 15. Hydrogen peroxide 30% solution

10 Fisher Catalog # H325

Store in the dark at 4 C until ready to use

16. ABTS/H<sub>2</sub>O<sub>2</sub>

Formulation: 15 mls ABTS solution  
2 ul H<sub>2</sub>O<sub>2</sub>

15 Prepare 5 minutes before use and room tempera-  
ture

17. 0.2 M HCL stock in H<sub>2</sub>O

Procedure.

1. Coat Corning 96-well elisa plates with 0.5 ug  
20 per well 05-101 antibody.

Bring final volume to 100 ul per well with PBS.  
Coat plates overnight at 4° C.

2. Remove unbound 05-101 from wells by inverting  
plate to remove liquid.

25 Wash 1x with distilled H<sub>2</sub>O by filling wells  
Pat the plate on a paper towel to remove excess  
liquid.

3. Block plates with 5% milk in PBS.  
150 ul per well.

30. Incubate plate 30 minutes while shaking on a  
microtiter plate shaker.

4. Wash plate 3x with dionized water, then once  
with TBST

5. Add 7 ug A431 cell lysate per well (EGFR source).

Add PBS to final volume of 100 ul per well

Incubate 30 minutes while shaking.

5 6. Wash as described in step 4.

7. At this point, drugs or extracts are added to the wells.

Dilute drugs/extracts 1:100 (unless specified otherwise) in TBS + 10% DMSO in 96-well polypropylene plates.

Add 120 ul TBS to ELISA plate containing captured EGFR.

Add 13.5 ul diluted drugs/extracts to ELISA plate.

15 To control wells (wells which do not receive any drug) add 135 ul TBS

+ 1% DMSO.

Incubate plate 30 minutes while shaking.

8. Add 15 ul of 0.03 mM ATP + 50 mM  $\text{MnCl}_2$  phosphorylation mix directly to all wells except negative control well which does not receive ATP/ $\text{MnCl}_2$  (see diagram).

(150 ul final volume in well with 3 uM ATP/5 mM  $\text{MnCl}_2$  final concentration in well.)

Incubate 5 minutes while shaking vigorously.

25 \*NOTE: It is critical that ATP/ $\text{MnCl}_2$

phosphorylates the receptor for 5 minutes only.

It is best to add the ATP/ $\text{MnCl}_2$  with an 12 channel pipettor 1 row at a time leaving 20 seconds between each row so that the reaction may be stopped with EDTA exactly 5 minutes later (this depends on the number of plates being phosphorylated in one batch). Shake between each addition.

9. After 5 minutes, to stop reaction, add 16.5 ul of 200 mM EDTA pH 8.0 for 20 mM final in well, shaking



75

continuously between each addition. This is done using the same timing method as above. After last row has received EDTA, shake plate an additional minute.

10. Wash 4x with deionized water, twice with TBST.
- 5 11. Add rabbit polyclonal anti-phosphotyrosine serum.  
Dilute 1:3000 in TBST.  
Add 100 ul per well.  
Incubate 30-45 minutes while shaking.
- 10 12. Wash as described above in step 4.
13. Add BioSource anti-rabbit peroxidase conjugate antibody.  
Dilute 1:2000 in TBST.  
Add 100 ul per well.
- 15 Incubate 30 minutes while shaking.
14. Wash as described in step 4.
15. Add 100 ul of ABTS/H<sub>2</sub>O<sub>2</sub> solution to well.  
Incubate 5 to 10 minutes while shaking.  
Remove bubbles
- 20 16. If necessary stop reaction with the addition of 100ul of 0.2M HCl per well
17. Read assay on Dynatech MR7000 elisa reader.  
Test Filter: 410 nM  
Reference Filter: 630 nM

25

(b) Cell Growth Assays

The cell growth assays described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al. may be conducted to measure the effect  
30 of the claimed compounds upon cell growth as a result of the compound's interaction with one or more RTKs.

(vi) Assay Measuring Phosphorylating Function of Raf

The following assay reports the amount of RAF-catalyzed phosphorylation of its target protein MEK as well as MEK's target MAPK. The RAF gene sequence is described in Bonner et al., 1985, *Molec. Cell. Biol.* 5: 1400-1407, and  
5 is readily accessible in multiple gene sequence data banks. Construction of the nucleic acid vector and cell lines utilized for this portion of the invention are fully described in Morrison et al., 1988, *Proc. Natl. Acad. Sci. USA* 85: 8855-8859.

10

#### Materials and Reagents

1. Sf9 (*Spodoptera frugiperda*) cells; GIBCO-BRL, Gaithersburg, MD.
2. RIPA buffer: 20 mM Tris/HCl pH 7.4, 137 mM NaCl,  
15 10 % glycerol, 1 mM PMSF, 5 mg/L Aprotinin, 0.5 % Triton X-100;
3. Thioredoxin-MEK fusion protein (T-MEK): T-MEK expression and purification by affinity chromatography were performed according to the manufacturer's procedures.  
20 Catalog# K 350-01 and R 350-40, Invitrogen Corp., San Diego, CA
4. His-MAPK (ERK 2); His-tagged MAPK was expressed in XL1 Blue cells transformed with pUC18 vector encoding His-MAPK. His-MAPK was purified by Ni-affinity chromatog-  
25 raphy. Cat# 27-4949-01, Pharmacia, Alameda, CA
5. Sheep anti mouse IgG: Jackson laboratories, West Grove, PA Catalog, # 515-006-008, Lot# 28563
6. RAF-1 protein kinase specific antibody: URP2653 from UBI.
- 30 7. Coating buffer: PBS; phosphate buffered saline, GIBCO-BRL, Gaithersburg, MD
8. Wash buffer: TBST - 50 mM Tris/HCL pH 7.2, 150 mM NaCl, 0.1 % Triton X-100
9. Block buffer: TBST, 0.1 % ethanolamine pH 7.4

10. DMSO, Sigma, St. Louis, MO
11. Kinase buffer (KB): 20 mM Hepes/HCl pH 7.2, 150 mM NaCl, 0.1 % Triton X-100, 1 mM PMSF, 5 mg/L Aprotinin, 75  $\mu$ M sodium ortho vanadate, 0.5 mM DTT and 10 mM  $MgCl_2$ .
- 5 12. ATP mix: 100 mM  $MgCl_2$ , 300  $\mu$ M ATP, 10  $\mu$ Ci  $\gamma$ - $^{33}P$  ATP (Dupont-NEN)/mL.
13. Stop solution: 1 % phosphoric acid; Fisher, Pittsburgh, PA.
14. Wallac Cellulose Phosphate Filter mats; Wallac,  
10 Turku, Finland.
15. Filter wash solution: 1 % phosphoric acid, Fisher, Pittsburgh, PA.
16. Tomtec plate harvester, Wallac, Turku, Finland.
17. Wallac beta plate reader # 1205, Wallac, Turku,  
15 Finland.
18. NUNC 96-well V bottom polypropylene plates for compounds Applied Scientific Catalog # AS-72092.

#### Procedure

- 20 All of the following steps are conducted at room temperature unless specifically indicated.
1. ELISA plate coating: ELISA wells are coated with 100  $\mu$ L of Sheep anti mouse affinity purified antiserum (1 $\mu$ g/100 $\mu$ L coating buffer) over night at 4  $^{\circ}$ C. ELISA plates  
25 can be used for two weeks when stored at 4  $^{\circ}$ C.
2. Invert the plate and remove liquid. Add 100  $\mu$ L of blocking solution and incubate for 30 min.
3. Remove blocking solution and wash four times with wash buffer. Pat the plate on a paper towel to  
30 remove excess liquid.
4. Add 1  $\mu$ g of purified Sumo 22 to each well and incubate for 1 hour. Wash as described in step 3.
5. Thaw lysates from RAS/RAF infected Sf9 cells and dilute with TBST to 10  $\mu$ g/100  $\mu$ L. Add 10  $\mu$ g of diluted

lysate to the wells and incubate for 1 hour. Shake the plate during incubation. Negative controls receive no lysate. Lysates from RAS/RAF infected Sf9 insect cells are prepared after cells are infected with recombinant baculoviruses at a MOI of 5 for each virus, and harvested 48 hours later. The cells are washed once with PBS and lysed in RIPA buffer. Insoluble material is removed by centrifugation (5 min at 10 000 x g). Aliquots of lysates are frozen in dry ice/ethanol and stored at - 80 °C until use.

6. Remove non-bound material and wash as outlined above (step 3).

7. Add 2 µg of T-MEK and 2 µg of His-MAPK per well and adjust the volume to 40 µL with kinase buffer.

8. Predilute compounds (stock solution 10 mg/mL DMSO) or extracts 20 fold in TBST plus 1% DMSO. Add 5 µL of the prediluted compounds/extracts to the wells described in step 6. Incubate for 20 min. Controls receive no drug.

9. Start the kinase reaction by addition of 5 µL ATP mix; Shake the plates on an ELISA plate shaker during incubation.

10. Stop the kinase reaction after 60 min by addition of 30 µL stop solution to each well.

11. Place the phosphocellulose mat and the ELISA plate in the Tomtec plate harvester. Harvest and wash the filter with the filter wash solution according to the manufacturers recommendation. Dry the filter mats. Seal the filter mats and place them in the holder. Insert the holder into radioactive detection apparatus and quantitate the radioactive phosphorous on the filter mats.

Alternatively, 40 µL aliquots from individual wells of the assay plate can be transferred to the corresponding positions on the phosphocellulose filter mat. After air-

drying the filters, put the filters in a tray. Gently rock the tray, changing the wash solution at 15 min intervals for 1 hour. Air-dry the filter mats. Seal the filter mats and place them in a holder suitable for measuring the radioactive phosphorous in the samples. Insert the holder into a detection device and quantitate the radioactive phosphorous on the filter mats.

(c) Toxicity and Animal Models

Measurement Of Cell Toxicity and *In Vivo* Animal Models are described in International Patent Publication No. WO 96/40116, published December 19, 1996 by Tang et al.

(d) MET Biochemical Kinase Assay

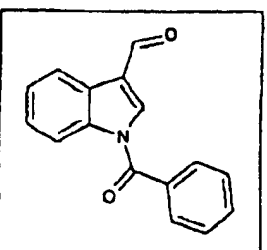
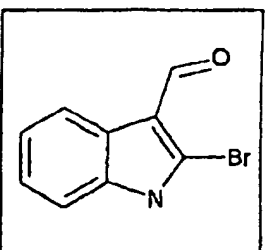
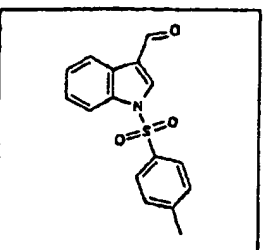
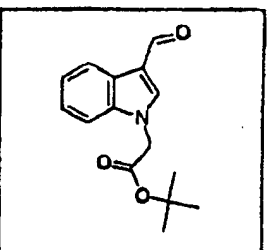
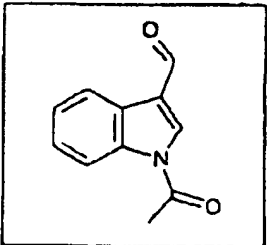
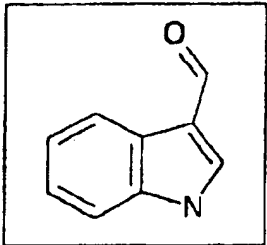
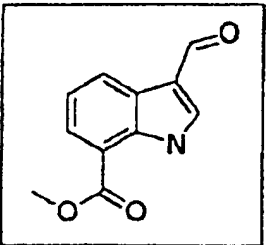
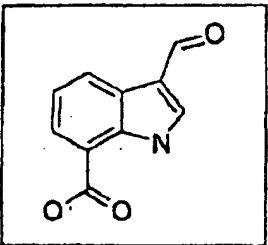
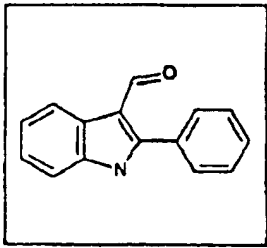
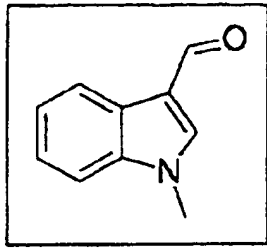
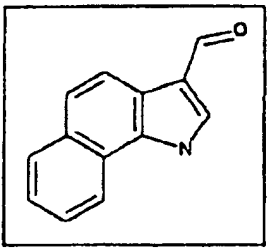
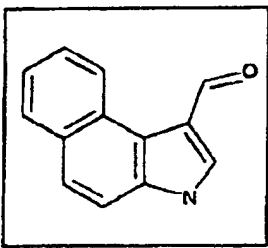
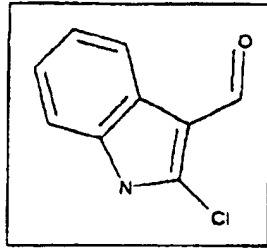
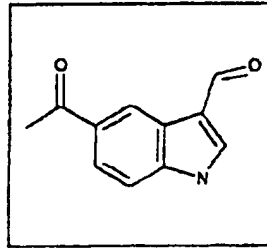
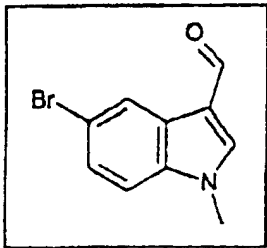
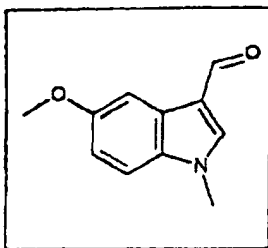
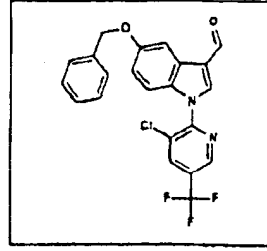
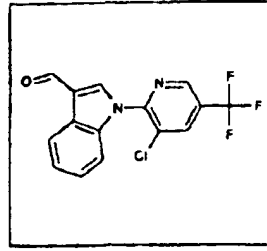
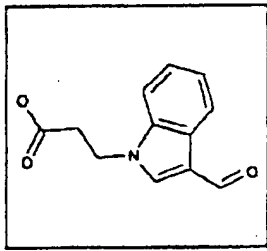
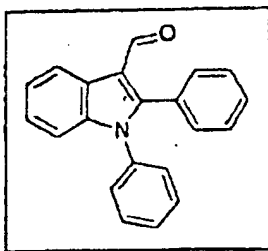
A met biochemical kinase assay may be performed for met generally as described above for other kinases by substituting that or the other kinases. In particular, ELISA plates are coated with goat anti-rabbit Fc antibodies, which are used to capture commercially available (from Santa Cruz Biotechnology) rabbit polyclonal antibodies to the cytoplasmic domain of human MET. Lysates are made from 293T cells that have been transiently transfected with a chimeric receptor composed of the extracellular domain of the EGFR and the transmembrane and cytoplasmic domain of the MET receptor, or from NCI-H441 cells (a human lung adenocarcinoma cell line) which express high endogenous levels of MET. The chimeric receptors, or MET, from these lysates are captured on the antibody coated plates. After washing away extraneous proteins, test compounds are added and an *in vitro* kinase assay is performed by addition of an appropriate kinase buffer (containing ATP, divalent metal ions, etc.). Incorporation of phosphate into the captured receptors is detected with an anti-phosphotyrosine antibody conjugate

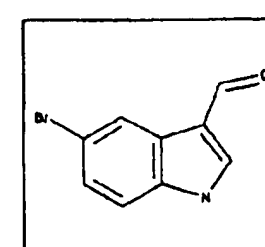
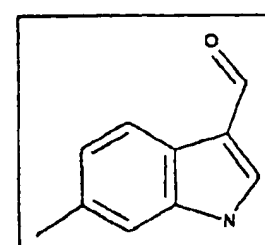
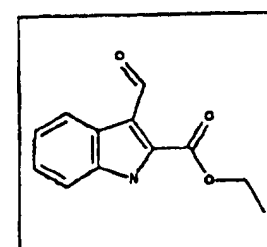
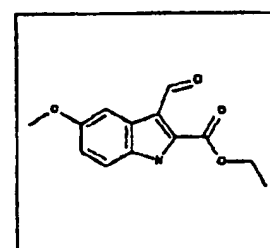
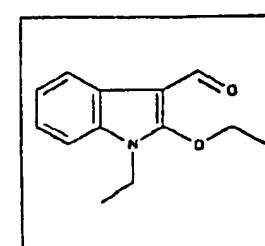
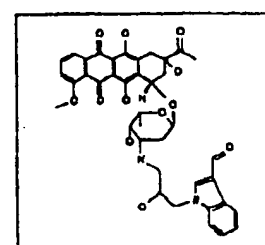
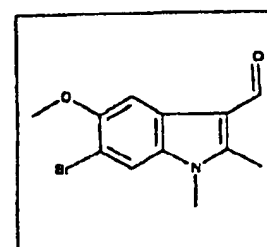
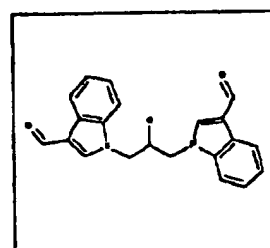
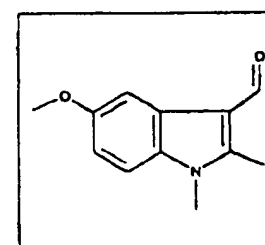
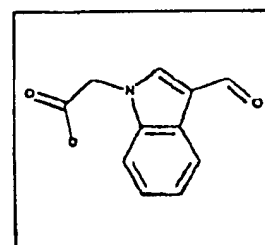
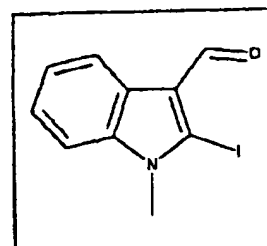
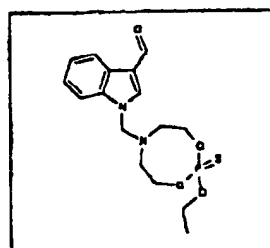
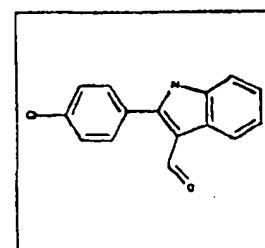
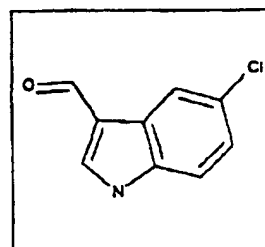
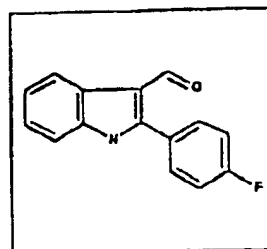
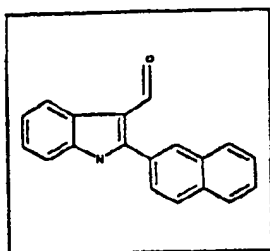
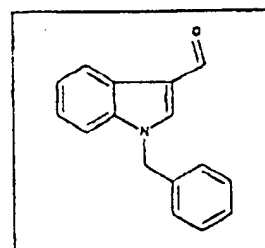
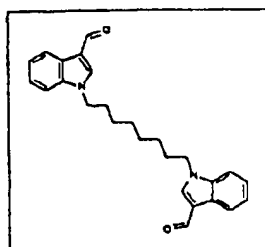
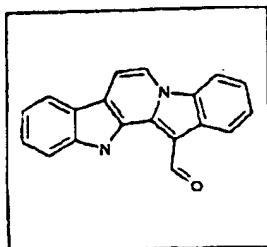
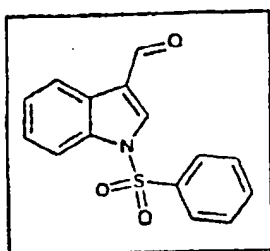
with horse radish peroxidase using TMB as a substrate for colorimetric detection.

The present invention is not to be limited in scope by the exemplified embodiments which are intended as  
5 illustrations of single aspects of the invention. Indeed, various modifications of the invention in addition to those described herein will become apparent to those skilled in the art from the foregoing description and accompanying drawings. Such modifications are intended to  
10 fall within the scope of the appended claims.

All references cited herein are hereby incorporated by reference in their entirety.

Other embodiments are within the following claims.







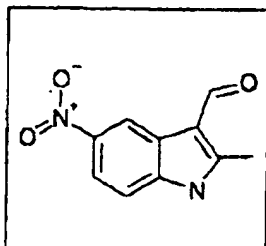
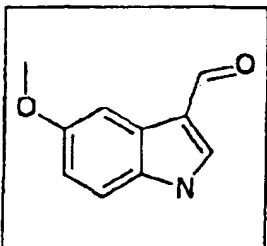
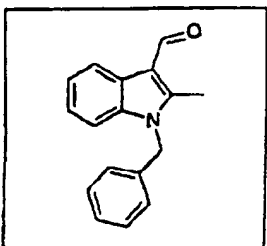
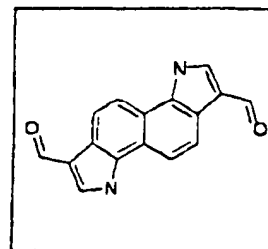
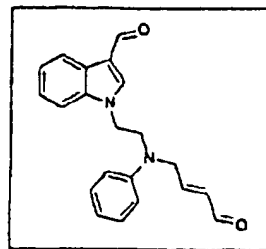
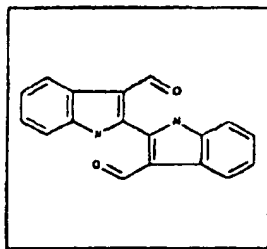
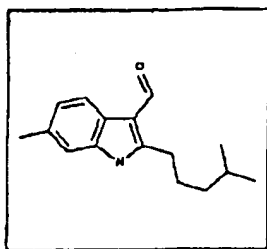


TABLE 2

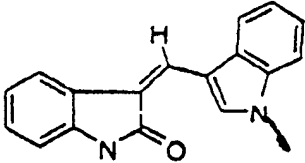
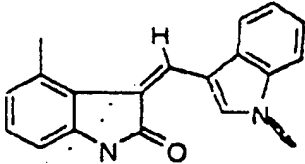
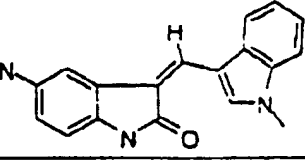
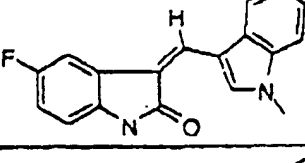
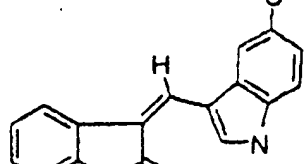
FLK Kinase IC50 ( $\mu$ M)	STRUCTURES
0.7	
7.7	
2.5	
14	
13	

TABLE 3, SHEET 1 OF 3

NUMBER	ID	STRUCTURE
1	ind/ald-001	
2	ind/ald-002	
3	ind/ald-003	
4	ind/ald-004	
5	ind/ald-005	
6	ind/ald-006	
7	ind/ald-007	
8	ind/ald-008	
9	ind/ald-009	
10	ind/ald-010	
11	ind/ald-011	

TABLE 3, SHEET 2 OF 3

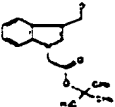
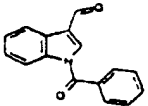
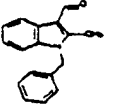
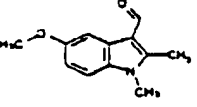
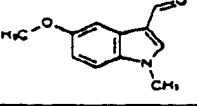
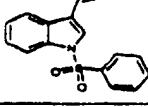
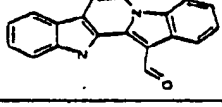
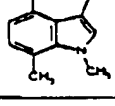
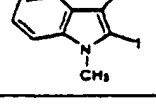
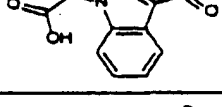
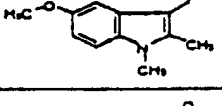
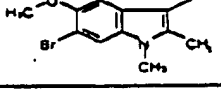
12	ind/ald-012	
13	ind/ald-013	
14	ind/ald-014	
15	ind/ald-015	
16	ind/ald-016	
17	ind/ald-017	
18	ind/ald-018	
19	ind/ald-019	
20	ind/ald-020	
21	ind/ald-021	
22	ind/ald-022	
23	ind/ald-023	

TABLE 3, SHEET 3 OF 3

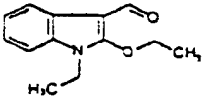
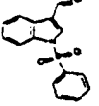
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25	ind/ald-025	

TABLE 4, SHEET 1 OF 3

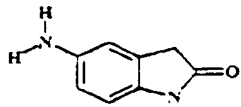
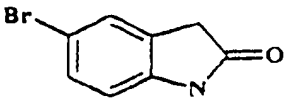
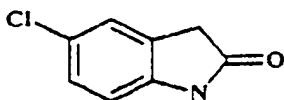
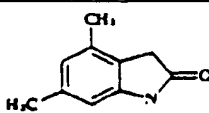
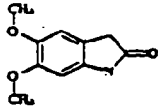
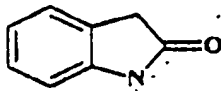
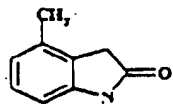
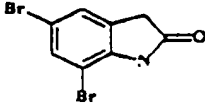
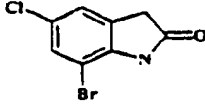
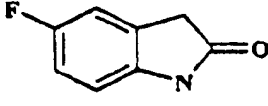
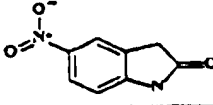
NUMBER	CORP ID	STRUCTURE
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2	oxindole-002	
3	oxindole-003	
4	oxindole-004	
5	oxindole-005	
6	oxindole-006	
7	oxindole-007	
8	oxindole-008	
9	oxindole-009	
10	oxindole-010	
11	oxindole-011	

TABLE 4, SHEET 2 OF 3

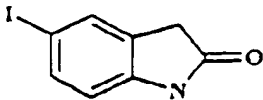
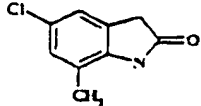
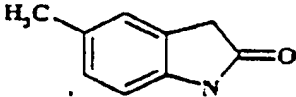
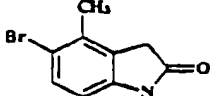
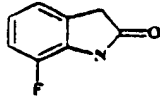
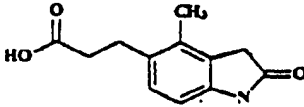
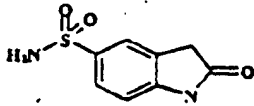
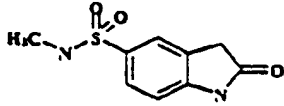
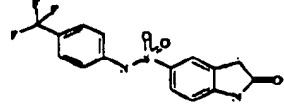
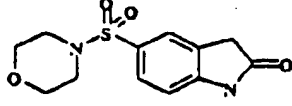
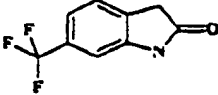
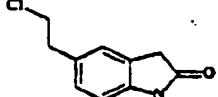
12	oxindole-012	
13	oxindole-013	
14	oxindole-014	
15	oxindole-015	
16	oxindole-016	
17	oxindole-028	
18	oxindole-036	
19	oxindole-037	
20	oxindole-038	
21	oxindole-039	
22	oxindole-040	
23	oxindole-041	

TABLE 4, SHEET 3 OF 3

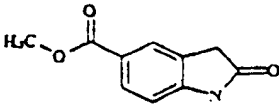
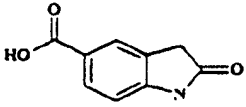
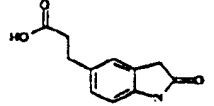
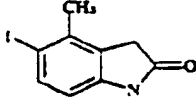
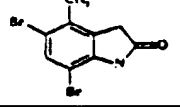
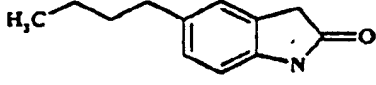
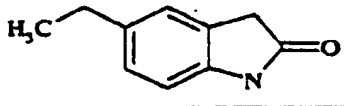
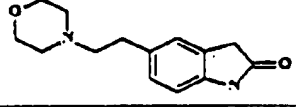
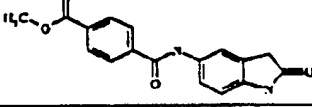
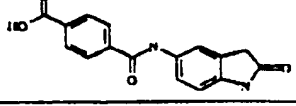
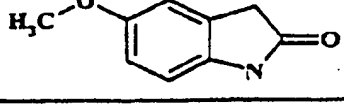
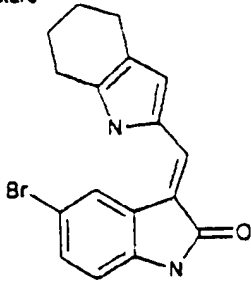
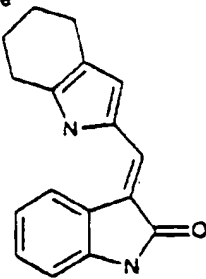
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25	oxindole-048	
26	oxindole-050	
27	oxindole-054	
28	oxindole-056	
29	oxindole-057	
30	oxindole-058	
31	oxindole-059	
32	oxindole-060	
33	oxindole-061	
34	oxindole-062	



TABLE 5

Structure	
	Formula $C_{17}H_{15}BrN_2O$
	M.W. 343.2230

Structure	
	Formula $C_{17}H_{16}N_2O$
	M.W. 264.3260

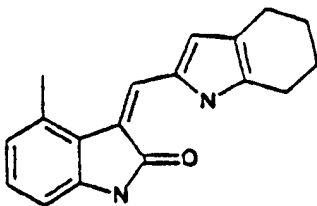
Structure	
	Formula $C_{18}H_{18}N_2O$
	M.W. 278.3530

TABLE 6

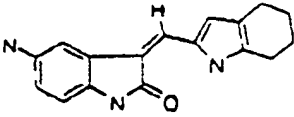
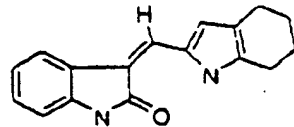
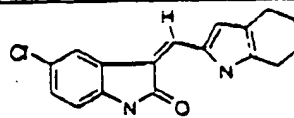
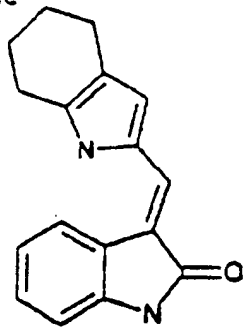
FLK Kinase IC50 ( $\mu$ M)	STRUCTURES
1.2	
1.4	
5	

TABLE 7

<b>Structure</b> 	0128	
	<b>Activity</b>	
	1C50 = 1.7 $\mu$ m	FLK Kinase
	1C50 = 6.8 $\mu$ m	PDGF Kinase

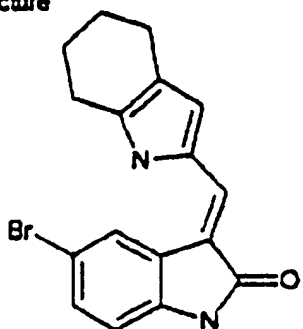
<b>Structure</b> 	0129	
	<b>Activity</b>	
	1C50 = 19.6 $\mu$ m	FLK Kinase
	1C50 = 0.8 $\mu$ m	PDGF Kinase

TABLE 8

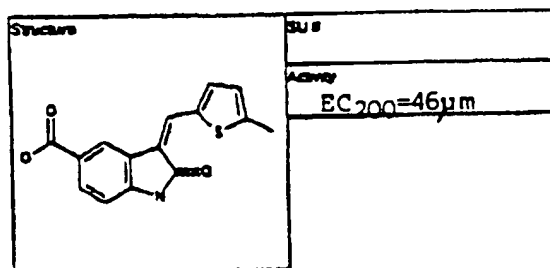
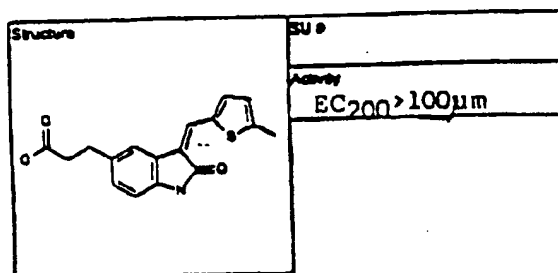
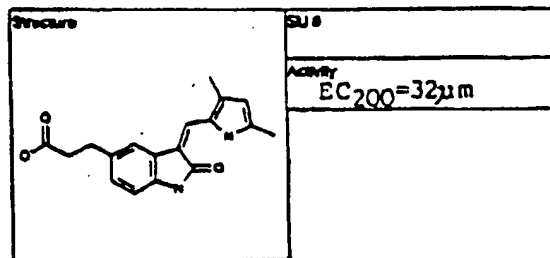
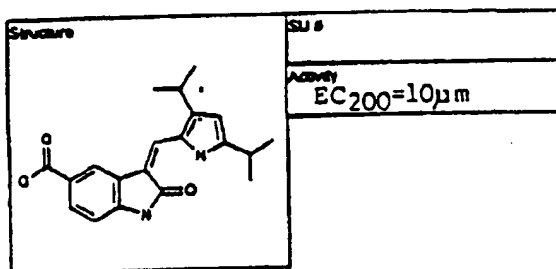
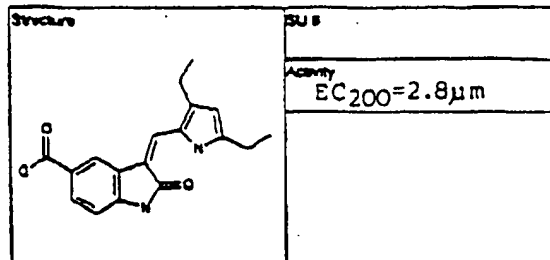
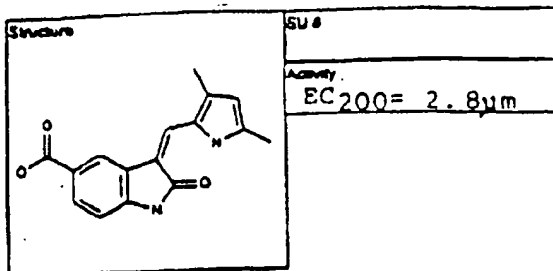


TABLE 9 (SHEET 1 OF 5)

	3-[(pyrrol-2-yl)methylidenyl]-5-sulfonyl-2-indolinone
5	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-sulfonyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-sulfonyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-sulfonyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-sulfonyl-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-sulfonyl-2-indolinone
10	
	3-[(pyrrol-2-yl)methylidenyl]-5-aminosulfonyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-aminosulfonyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-aminosulfonyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-aminosulfonyl-2-indolinone
15	3-[(3-methylthien-2-yl)methylidenyl]-5-aminosulfonyl-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-aminosulfonyl-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-methoxycarbonyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-methoxycarbonyl-2-indolinone
20	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-methoxycarbonyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-methoxycarbonyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-methoxycarbonyl-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-methoxycarbonyl-2-indolinone
25	3-[(pyrrol-2-yl)methylidenyl]-5-diethanolamino-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-diethanolamino-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-diethanolamino-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-diethanolamino-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-diethanolamino-2-indolinone
30	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-diethanolamino-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-(2,3-dihydroxypropylamino)-2-indolinone

TABLE 9 (SHEET 2 OF 5)

5	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-(2,3-dihydroxypropylamino)-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-(2,3-dihydroxypropylamino)-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-(2,3-dihydroxypropylamino)-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-(2,3-dihydroxypropylamino)-2-indolinone
10	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-(2,3-dihydroxypropylamino)-2-
	3-[(pyrrol-2-yl)methylidenyl]-5-ureido-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-ureido-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-ureido-2-indolinone
15	3-[(2-methylthien-5-yl)methylidenyl]-5-ureido-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-ureido-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-ureido-2-indolinone
20	3-[(pyrrol-2-yl)methylidenyl]-5-guanidino-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-guanidino-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-guanidino-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-guanidino-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-guanidino-2-indolinone
25	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-guanidino-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-glyceroylamido-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-glyceroylamido-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-glyceroylamido-2-indolinone
30	3-[(2-methylthien-5-yl)methylidenyl]-5-glyceroylamido-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-glyceroylamido-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-glyceroylamido-2-indolinone

TABLE 9 (SHEET 3 OF 5)

5	3-[(pyrrol-2-yl)methylidenyl]-5-[(3-piperidiny)propanoylamino]-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-[(3-piperidiny)propanoylamino]-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-[(3-piperidiny)propanoylamino]-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-[(3-piperidiny)propanoylamino]-2-indolinone
10	3-[(3-methylthien-2-yl)methylidenyl]-5-[(3-piperidiny)propanoylamino]-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-[(3-piperidiny)propanoylamino]-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-mesylamino-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-mesylamino-2-indolinone
15	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-mesylamino-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-mesylamino-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-mesylamino-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-mesylamino-2-indolinone
20	3-[(pyrrol-2-yl)methylidenyl]-5-glycoloyloxy-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-glycoloyloxy-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-glycoloyloxy-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-glycoloyloxy-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-glycoloyloxy-2-indolinone
25	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-glycoloyloxy-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-(2,3-dihydroxypropoxy)-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-(2,3-dihydroxypropoxy)-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-(2,3-dihydroxypropoxy)-2-indolinone
30	e
	3-[(2-methylthien-5-yl)methylidenyl]-5-(2,3-dihydroxypropoxy)-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-(2,3-dihydroxypropoxy)-2-indolinone

TABLE 9 (SHEET 4 OF 5)

5	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-(2,3-dihydroxypropoxy)-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-aminomethyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-aminomethyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-aminomethyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-aminomethyl-2-indolinone
10	3-[(3-methylthien-2-yl)methylidenyl]-5-aminomethyl-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-aminomethyl-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-amidino-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-amidino-2-indolinone
15	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-amidino-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-amidino-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-amidino-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-amidino-2-indolinone
20	3-[(pyrrol-2-yl)methylidenyl]-5-hydroxymethyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-hydroxymethyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-hydroxymethyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-hydroxymethyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-hydroxymethyl-2-indolinone
25	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-hydroxymethyl-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-phosphonooxy-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-phosphonooxy-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-phosphonooxy-2-indolinone
30	3-[(2-methylthien-5-yl)methylidenyl]-5-phosphonooxy-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-phosphonooxy-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-phosphonooxy-2-indolinone



TABLE 9 (SHEET 5 OF 5)

5	3-[(pyrrol-2-yl)methylidenyl]-5-ethoxycarbonyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-ethoxycarbonyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-ethoxycarbonyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-ethoxycarbonyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-ethoxycarbonyl-2-indolinone
10	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-ethoxycarbonyl-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-benzyloxycarbonyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-benzyloxycarbonyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-benzyloxycarbonyl-2-indolinone
15	3-[(2-methylthien-5-yl)methylidenyl]-5-benzyloxycarbonyl-2-indolinone 5-benzyloxycarbonyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-benzyloxycarbonyl-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-benzyloxycarbonyl-2-indolinone
20	3-[(pyrrol-2-yl)methylidenyl]-5-phenylaminocarbonyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-phenylaminocarbonyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-phenylaminocarbonyl-2-indolinone
	3-[(2-methylthien-5-yl)methylidenyl]-5-phenylaminocarbonyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-phenylaminocarbonyl-2-indolinone
25	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-phenylaminocarbonyl-2-indolinone
	3-[(pyrrol-2-yl)methylidenyl]-5-benzylaminocarbonyl-2-indolinone
	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-benzylaminocarbonyl-2-indolinone
	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-benzylaminocarbonyl-2-indolinone
30	3-[(2-methylthien-5-yl)methylidenyl]-5-benzylaminocarbonyl-2-indolinone
	3-[(3-methylthien-2-yl)methylidenyl]-5-benzylaminocarbonyl-2-indolinone
	3-[(4,5,6,7-tetrahydroindol-3-yl)methylidenyl]-5-benzylaminocarbonyl-2-indolinone

TABLE 10 SHEET 1 OF 5

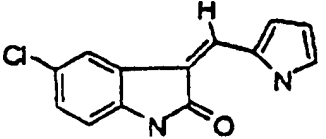
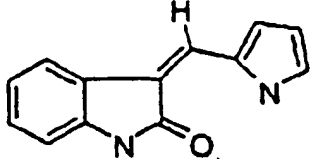
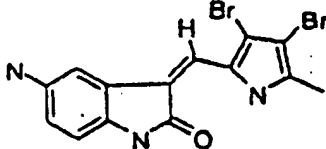
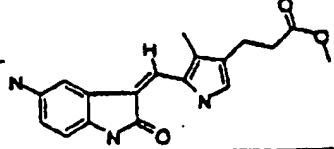
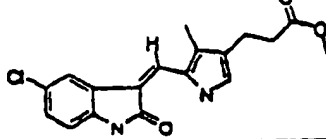
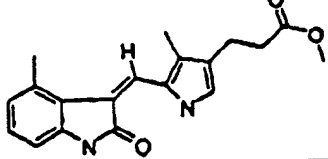
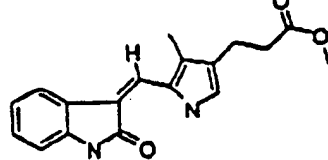
FLK Kinase IC50 ( $\mu$ M)	STRUCTURES	METHOD
1.6		A
2.6		A
1.9		B
4.7		B
5.6		B
10.8		B
12.5		A

TABLE 10 SHEET 2 OF 5

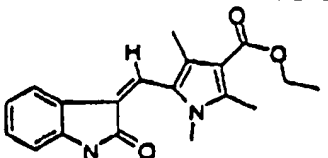
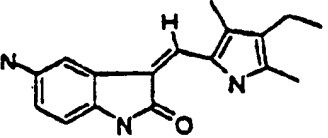
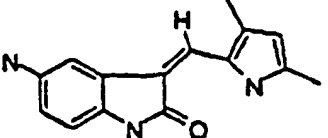
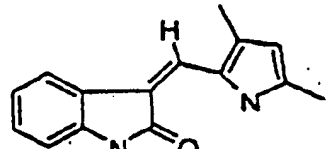
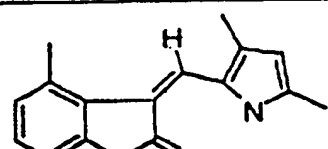
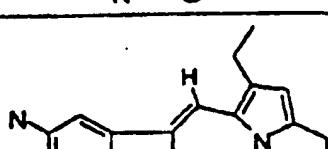
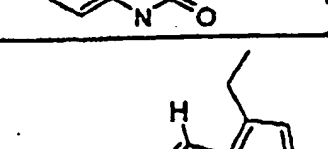
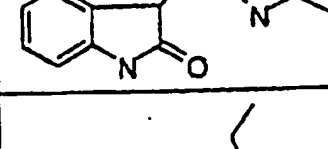
0.97		B
1.5		B
1.1		B
3.5		A
7.3		A
5.6		B
8.1		A
17.3		A

TABLE 10 SHEET 3 OF 5

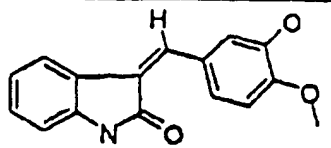
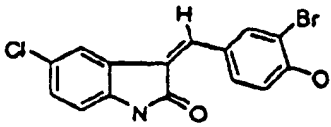
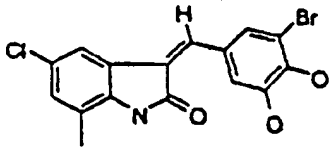
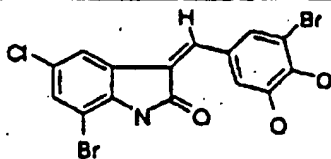
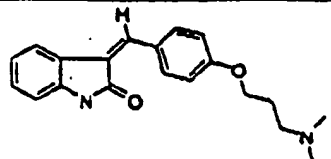
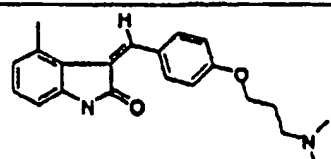
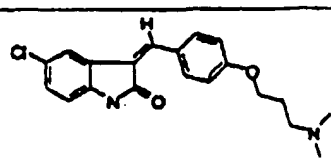
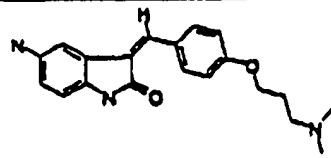
2.9		B
5.2		B
18.5		B
8.8		B
4		B
8		B
11.5		B
13.7		B

TABLE 10 SHEET 4 OF 5

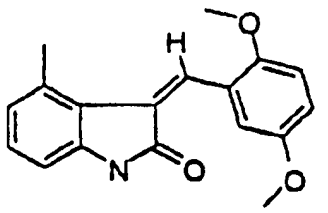
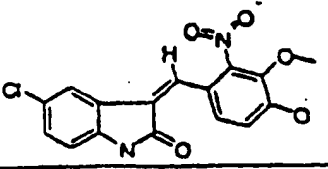
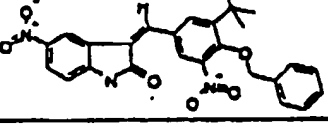
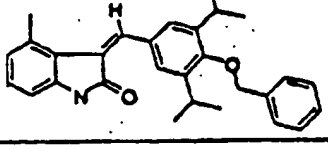
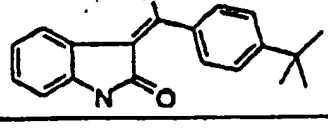
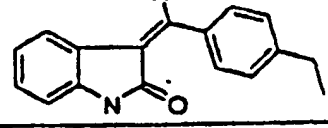
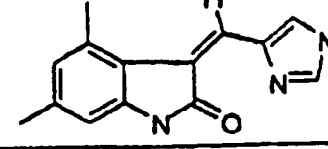
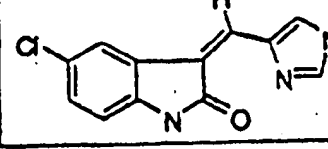
10.4		B
10.7		B
16.4		B
19.9		B
9.7		B
20.3		B
4.6		B
5.6		B

TABLE 10 SHEET 5 OF 5

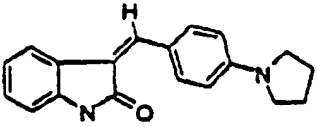
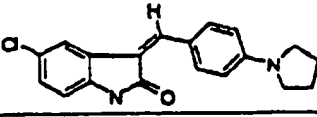
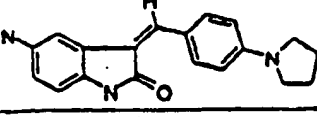
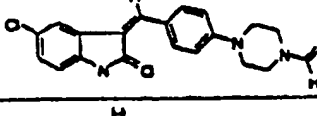
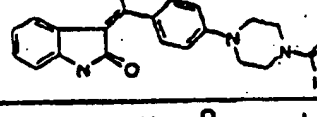
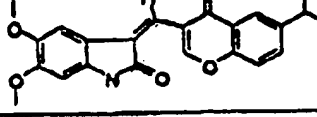
9.9		A
12.3		B
18.4		B
5.8		B
6.2		A
17.1		B

Table 11

5-aminoxindole oxindole-001	5-bromoxindole oxindole-002	5-chloroxindole oxindole-003
4,5-dimethyloxindole oxindole-004	5,5-dimethoxyoxindole oxindole-005	oxindole oxindole-006
4-methyloxindole oxindole-007	5,7-dibromoxindole oxindole-008	7-bromo-5-chloroxindole oxindole-009
5-fluoroxindole oxindole-010	5-nitroxindole oxindole-011	5-iodoxindole oxindole-012
5-chloro-7-methyloxindole oxindole-013	5-methyloxindole oxindole-014	5-bromo-4-methyloxindole oxindole-015
7-fluoroxindole oxindole-016	7-chloroxindole oxindole-017	4-fluoroxindole oxindole-018

Table 11 (continued)

6-fluorooxindole	4-chlorooxindole	5-chlorooxindole
oxindole-019	oxindole-020	oxindole-021
5-bromo-7-methyloxindole	7-chloro-5-cyanooxindole	4-bromooxindole
oxindole-022	oxindole-023	oxindole-024
7-methoxyoxindole	4-methyl-5-carboxyoxindole	4-methyl-5-carboxymethyloxindole
oxindole-025	oxindole-026	oxindole-027
4-methyl-5-carboxyethyloxindole	4-methyl-5-(3-carboxy-n-propyl)oxindole	4-methyl-5-hydroxymethyloxindole
oxindole-028	oxindole-029	oxindole-030
4-methyl-5-methoxymethyloxindole	4-methyl-5-(2-hydroxyethyl)oxindole	4-methyl-5-(2-methoxyethyl)oxindole
oxindole-031	oxindole-032	oxindole-033
4-methyl-5-(3-hydroxy-n-propyl)oxindole	4-methyl-5-(3-methoxy-n-propyl)oxindole	5-aminosulfonyloxindole
oxindole-034	oxindole-035	oxindole-036



Table 11 (continued)

5-methylaminosulfonyloxindole oxindole-037	5-(4-trifluoromethylanilinosulfonyl)oxindole oxindole-038	5-(morpholin-1-yl-sulfonyl)oxindole oxindole-039
6-trifluoromethyloxindole oxindole-040	5-(2-chloroethyl)oxindole oxindole-041	5-carboxymethyloxindole oxindole-042
6-carboxymethyloxindole oxindole-043	4-methoxycarbonyloxindole oxindole-044	5-methoxycarbonyloxindole oxindole-045
6-methoxycarbonyloxindole oxindole-046	4-carboxyoxindole oxindole-047	5-carboxyoxindole oxindole-048
6-carboxyoxindole oxindole-049	5-carboxyethyloxindole oxindole-050	5-hydroxyethyloxindole oxindole-051
4-methyl-5-aminooxindole oxindole-052	4-methyl-5-nitrooxindole oxindole-053	4-methyl-5-iodooxindole oxindole-054

Table 11 (continued)

4-methyl-5-chlorooxindole
oxindole-055

Table 12

2-ethoxybenzaldehyde	2-thiophenecarboxaldehyde	1-methylpyrrole-2-carboxaldehyde
CHO-001	CHO-002	CHO-003
4-fluorobenzaldehyde	Indole-3-carboxaldehyde	5-methylthiophene-2-carboxaldehyde
CHO-004	CHO-005	CHO-006
4-bromobenzaldehyde	pyrrole-2-carboxaldehyde	2-Hydroxy-3-methoxybenzaldehyde
CHO-007	CHO-008	CHO-009
3-methyl-2-thiophenecarboxaldehyde	3,4-Dibromo-5-methyl-2-pyrroledicarboxaldehyde	Ethyl-2,4-Dimethyl-5-formyl-3-pyrroledicarboxylate
CHO-010	CHO-011	CHO-012
3-Bromo-2-hydroxy-5-methoxybenzaldehyde	1-Hydroxy-2-naphthaldehyde	Ethyl-2-(ethoxycarbonyl)-4-(ethoxycarbonylmethyl)-5-formyl-3-pyrroledicarboxylate
CHO-013	CHO-014	CHO-015
Ethyl-5-formyl-2-methyl-3-furancarboxylate	4-Formyl-3-methoxycarbonylmethyl-5-methyl-1H-pyrrole-2-carboxylic acid methyl ester	2-Hydroxy-3-nitrobenzaldehyde
CHO-016	CHO-017	CHO-018
2,4-Dihydroxy-3-methylbenzaldehyde	Methyl 5-formyl-4-methyl-3-pyrroledipropionate	2-furaldehyde
CHO-019	CHO-020	CHO-021
5-Nitro-2-furaldehyde	4-Ethoxy-3-methoxybenzaldehyde	3,4-Dihydroxybenzaldehyde
CHO-022	CHO-023	CHO-024

Table 12 (continued)

2,4-Dimethoxybenzaldehyde	3,5-Dimethyl-4-ethyl-2-pyridylcarboxaldehyde	2,4,6-trimethoxybenzaldehyde
CHO-025	CHO-026	CHO-027
4-Hydroxybenzaldehyde	4-(Dimethylamino)benzaldehyde	2,4-Dimethyl-3-carboethoxypyridine-5-carboxaldehyde
CHO-028	CHO-029	CHO-030
2-chloro-4-fluorobenzaldehyde	3-Nitrobenzaldehyde	4-fluoro-2-(trifluoromethyl)benzaldehyde
CHO-031	CHO-032	CHO-033
2,4,6-Trifluorobenzaldehyde	4-hydroxy-2-methoxybenzaldehyde	3,4-Dimethoxybenzaldehyde
CHO-034	CHO-035	CHO-036
Salicylaldehyde	Benzaldehyde	3,5-diethylpyridine-2-carboxaldehyde
CHO-037	CHO-038	CHO-038
5-(Methylthio)thiophene-2-carboxaldehyde	2,4-Dihydroxy-6-methylbenzaldehyde	Methyl 5-formyl-4-methyl-3-pyridolepropionate
CHO-039	CHO-040	CHO-041
3-Ethoxy-4-hydroxybenzaldehyde	2-Hydroxy-5-methoxybenzaldehyde	2-Imidazolecarboxaldehyde
CHO-042	CHO-043	CHO-044
1-Methyl-2-formylbenzimidazole	4-Chloro-1-methylpyrazole-3-carboxaldehyde	2,3-dimethyl-5-formylthiophene
CHO-045	CHO-046	CHO-047

Table 12 (continued)

2-Formyl-4,5,6,7-tetrahydroindole	3-Chloromethyl-5-nitrosalicylaldehyde	1,3,5-Trichlorobenzylpyridine-2-carboxaldehyde
CHO-048	CHO-049	CHO-050
5-Chlorobenzene-2-carboxaldehyde	3,5-dimethyl-5-formylpyridine	3-(1-Butyl-4-hydroxybenzylidene)
CHO-051	CHO-052	CHO-053
3-(1-Butyl-5-bromo-4-hydroxybenzylidene)	3,5-Di-tert-butyl-4-hydroxybenzylidene hemihydrate	3-(1-Butyl-4-hydroxy-5-nitrobenzylidene)
CHO-054	CHO-055	CHO-056
2,4,3-Trihydroxybenzaldehyde	2-formyl-5-nitrothiophene	4-Carboxybenzaldehyde
CHO-057	CHO-058	CHO-059
2,4-difluorobenzaldehyde	3,5-Dimethyl-4-hydroxybenzaldehyde	3-Chloro-4-hydroxy-5-tert-butylbenzaldehyde
CHO-060	CHO-061	CHO-062
4-Ethoxy-3-methoxybenzaldehyde	2-Nitrothiophene-4-carboxaldehyde	4-(Dibutylamino)benzaldehyde
CHO-063	CHO-064	CHO-065
4-(Trifluoromethyl)benzaldehyde	4,6-Dimethoxy-salicylaldehyde	2,3,4-Trihydroxybenzaldehyde
CHO-066	CHO-067	CHO-068
2-Hydroxy-3-methoxybenzaldehyde	5-Bromo-3,4-dihydroxybenzaldehyde	3,4-Diacetoxybenzaldehyde
CHO-069	CHO-070	CHO-071

Table 12 (continued)

4-Hydroxy-3-methoxybenzaldehyde	2-Bromobenzaldehyde	2,4-Dihydroxybenzaldehyde
CHO-072	CHO-073	CHO-074
2-Hydroxy-4-methoxybenzaldehyde	3-Bromobenzaldehyde	3,5-Di-tert-butyl-2-hydroxybenzaldehyde
CHO-075	CHO-076	CHO-077
4-Carboxybenzaldehyde	4-Dimethylamino-1-naphthaldehyde	4-Hydroxy-3-nitrobenzaldehyde
CHO-078	CHO-079	CHO-080
2-Hydroxy-4-methoxybenzaldehyde	3-Hydroxy-4-nitrobenzaldehyde	4-Bromobenzaldehyde
CHO-081	CHO-082	CHO-083
2,3,6,7-Tetrahydro-8-hydroxy-1H,5H-benzo[ <i>g</i> ]quinoline-9-carboxaldehyde	3,5-Diisopropyl-4-hydroxybenzaldehyde	Benzo[ <i>b</i> ]furan-2-carboxaldehyde
CHO-084	CHO-085	CHO-086
1,5-Diiodo-4-methyl-2-pyrroledicarboxaldehyde	1-(4-chlorophenyl)pyrrole-2-carboxaldehyde	5-Ethyl-2-furaldehyde
CHO-087	CHO-088	CHO-089
3,4-Dimethylthieno[ <i>b</i> ]thiophene-2-carboxaldehyde	3-Bromothiophene-2-carboxaldehyde	6-Bromo-2-hydroxy-3-methoxybenzaldehyde
CHO-090	CHO-091	CHO-092
5-Methylfurfural	3-Methyl-1H-Pyrazole-5-carboxaldehyde	5-Iodo-2-furaldehyde
CHO-093	CHO-094	CHO-095

Table 12 (continued)

5-Methoxy-4-methylsalicyaldehyde	Enyl 2,4-Dimethyl-5-formyl-3-pyrrolec arboxylate	4-Ethyl-5-formyl-3-methyl-2-pyrro lecboxylic acid
CHO-096	CHO-097	CHO-098
Enyl-5-formyl-1,2,4-trimethyl-3-p yrrolecboxylate	4-(4-Formylpiperazine-1-yl)benz aldehyde	4-(4-Formylmorpholin-1-yl)ben zaldehyde
CHO-099	CHO-100	CHO-101
5-Chloro-3-methoxycarbonyl-4- methoxycarbonylmethyl-pyrrole- 2-carboxaldehyde	1-(4-chlorobenzyl)-4-chloro-pyra zole-5-carboxaldehyde	Imidazole-4-carboxaldehyde
CHO-102	CHO-103	CHO-104
4-Chloro-pyrazole-3-carboxalde hyde	5-Methoxycarbonyl-4-methyl-3-me thylcarbonyl-pyrrole-2-carboxald ehyde	5-(3-Benyl-4-hydroxy-3-oxobenzal dehyde
CHO-105	CHO-106	CHO-107
5-Bromofuran-2-carboxaldehyde	1,4-Dimethyl-3-formylcarbazole	1,4-Dihydroxy-2-formyl-3,6,7,8-t etrahydronaphthalene
CHO-108	CHO-109	CHO-110
5-fluoroisatin	3,4-dimethyl-2-formylpyrrole	isatin
CHO-111	CHO-112	CHO-113
5-ethyl-2-formylthiophene	4-methoxybenzaldehyde	4-diethylaminobenzaldehyde
CHO-114	CHO-115	CHO-116
3,5-diethylpyrrole-2-carboxalde hyde	5-Benzyloxyindole-3-carboxalde hyde	3-Bromo-5-chloro-2-hydroxyben zaldehyde
CHO-117	CHO-118	CHO-119

Table 12 (continued)

2,4-chlorophenylnitrobenzaldehyde	6-Chloropiperonal	Chromene-3-carboxaldehyde
CHO-120	CHO-121	CHO-122
3-Cyanobenzaldehyde	4-Cyanobenzaldehyde	6,8-Dichlorochromone-3-carboxaldehyde
CHO-123	CHO-124	CHO-125
2,5-dihydroxybenzaldehyde	2,3-Dimethoxybenzaldehyde	2,4-Dimethoxybenzaldehyde
CHO-126	CHO-127	CHO-128
2,5-Dimethoxybenzaldehyde	2,6-Dimethoxybenzaldehyde	3,5-Dimethoxybenzaldehyde
CHO-129	CHO-130	CHO-131
4-Dimethylamino-2-methoxybenzaldehyde	3,4-Dimethylbenzaldehyde	5,7-Dimethylchromone-3-carboxaldehyde
CHO-132	CHO-133	CHO-134
5-Ethylfurfural	Ferrocenecarboxaldehyde	Fluorene-2-carboxaldehyde
CHO-135	CHO-136	CHO-137
2-Fluoro-3-(trifluoromethyl)benzaldehyde	2-Fluoro-4-(trifluoromethyl)benzaldehyde	2-Fluoro-5-(trifluoromethyl)benzaldehyde
CHO-138	CHO-139	CHO-140
2-Fluoro-6-(trifluoromethyl)benzaldehyde	2-Formylphenoxyacetic acid	3-Methoxy-5-methylenedioxybenzaldehyde
CHO-141	CHO-142	CHO-143



Table 12 (continued)

2-Methoxy-1-naphthaldehyde	4-Methoxy-1-naphthaldehyde	4-(Methylthio)benzaldehyde
CHO-144	CHO-145	CHO-146
3-Methylthiocinnene-2-carboxaldehyde	5-Methylthiopropene-2-carboxaldehyde	pentamethylbenzaldehyde
CHO-147	CHO-148	CHO-149
3-Phenoxybenzaldehyde	Pyridine-2-carboxaldehyde	Pyridine-3-carboxaldehyde
CHO-150	CHO-151	CHO-152
Pyridine-4-carboxaldehyde	4-Pyridinylbenzaldehyde, 98+%	1,2,3,6-Tetrahydrobenzaldehyde
CHO-153	CHO-154	CHO-155
2,3,4-Trimethoxybenzaldehyde	2,4,5-Trimethoxybenzaldehyde	2,4,6-Trimethoxybenzaldehyde
CHO-156	CHO-157	CHO-158
3,4,5-Trimethoxybenzaldehyde	1-Acetyl-3-indolecarboxaldehyde	6-Chloro-3-formylchromone
CHO-159	CHO-160	CHO-161
6-Chloro-3-formyl-7-methylchromone	5-(2-Chlorophenyl)furfural	2-Chloro-3-quinolinecarboxaldehyde
CHO-162	CHO-163	CHO-164
6,8-Dibromo-3-formylchromone	2,5-Dimethoxy-3-tetrahydrofuran carboxaldehyde	4,5-Dimethyl-2-furaldehyde
CHO-165	CHO-166	CHO-167

Table 12 (continued)

3-Ethyl-3-carbazolecarboxaldehyde	3-Formyl-6,7-dimethylchromone	3-Formyl-6,8-dimethylchromone
CHO-168	CHO-169	CHO-170
3-formyl-6-isopropylchromone	3-formyl-6-methylchromone	3-formyl-6-nitrochromone
CHO-171	CHO-172	CHO-173
5-Formyluracil	5-Methoxyindole-3-carboxaldehyde	1-Methylisatin
CHO-174	CHO-175	CHO-176
5-(2-Nitrophenyl)furfural	(S)-(-)-Perillaldehyde	2-(Trifluoroacetyl)thiophene
CHO-177	CHO-178	CHO-179
3,5-diisopropyl-4-methoxybenzaldehyde	4-benzyloxy-3,5-diisopropylbenzaldehyde	3-t-butyl-4-methoxybenzaldehyde
CHO-180	CHO-181	CHO-182
4-benzyloxy-3-t-butylbenzaldehyde	3-bromo-5-t-butyl-4-methoxybenzaldehyde	4-benzyloxy-3-bromo-5-t-butylbenzaldehyde
CHO-183	CHO-184	CHO-185
3-t-butyl-5-chloro-4-methoxybenzaldehyde	4-benzyloxy-3-t-butyl-5-chlorobenzaldehyde	3-t-butyl-5-iodo-4-methoxybenzaldehyde
CHO-186	CHO-187	CHO-188
4-benzyloxy-3-t-butyl-5-iodobenzaldehyde	3-t-butyl-4-methoxy-5-nitrobenzaldehyde	4-benzyloxy-3-t-butyl-5-nitrobenzaldehyde
CHO-189	CHO-190	CHO-191

Table 12 (continued)

3,5-di- <i>t</i> -butyl-4-methoxybenzaldehyde	4-benzyloxy-3,3-di- <i>t</i> -butylbenzaldehyde	3,5-dimethyl-4-methoxybenzaldehyde
CHO-192	CHO-193	CHO-194
4-benzyloxy-3,5-dimethylbenzaldehyde	5-bromo-2-hydroxy-3-methoxybenzaldehyde	5-bromosalicylaldehyde 201
CHO-195	CHO-196	CHO-197
2-hydroxy-5-nitrobenzaldehyde	4-hydroxy-2-nitro-3-methoxybenzaldehyde	3-acoxysalicylaldehyde
CHO-198	CHO-199	CHO-200
3,5-dichlorosalicylaldehyde	5-chlorosalicylaldehyde	4-(diethylamino)salicylaldehyde
CHO-201	CHO-202	CHO-203
5-(trifluoromethoxy)salicylaldehyde	3,5-dibromosalicylaldehyde	3-fluorsalicylaldehyde
CHO-204	CHO-205	CHO-206
3-bromo-4-hydroxybenzaldehyde	5-chlorosalicylaldehyde	2,4-dimethyl-5-formylpyrrole
CHO-207	CHO-208	CHO-209
3,5-diisopropyl-2-formylpyrrole	3,5-dimethylthiophene-2-carboxaldehyde	3-methyl-5-ethylthiophene-2-carboxaldehyde
CHO-210	CHO-211	CHO-212
3-methyl-5-isopropylthiophene-2-carboxaldehyde	3-methyl-5-cyclopentylmethylthiophene-2-carboxaldehyde	3-methyl-5-cyclopropylthiophene-2-carboxaldehyde
CHO-213	CHO-214	CHO-215

Table 12 (continued)

4-methyl-5-ethylthiophene-2-carboxaldehyde	4-methyl-5-isopropylthiophene-2-carboxaldehyde	4-methyl-5-cyclopentylmethylthiophene-2-carboxaldehyde
CHO-218	CHO-217	CHO-218
4-methyl-5-cyclopropylmethylthiophene-2-carboxaldehyde	5-isopropylthiophene-2-carboxaldehyde	5-phenylmethylthiophene-2-carboxaldehyde
CHO-219	CHO-220	CHO-221
5-cyclohexylmethylthiophene-2-carboxaldehyde	5-cyclohexylthiophene-2-carboxaldehyde	5-phenylthiophene-2-carboxaldehyde
CHO-222	CHO-223	CHO-224
3-methyl-5-propylthiophene-2-carboxaldehyde	3-methyl-5-cyclohexylmethylthiophene-2-carboxaldehyde	4-methyl-5-propylthiophene-2-carboxaldehyde
CHO-225	CHO-226	CHO-227
4-methyl-5-cyclohexylmethylthiophene-2-carboxaldehyde	5-n-butylthiophene-2-carboxaldehyde	5-cyclopropylmethylthiophene-2-carboxaldehyde
CHO-228	CHO-229	CHO-230
5-cyclopropylthiophene-2-carboxaldehyde	3-methyl-5-phenylmethylthiophene-2-carboxaldehyde	4-methyl-5-phenylmethylthiophene-2-carboxaldehyde
CHO-231	CHO-232	CHO-233
5-cyclopentylmethylthiophene-2-carboxaldehyde	5-cyclopentylthiophene-2-carboxaldehyde	4,5-dimethylthiophene-2-carboxaldehyde
CHO-234	CHO-235	CHO-236
5-n-propylthiophene-2-carboxaldehyde		
CHO-237		

Table 13

MASTER BARCODE	PLATE ROW	PLATE COLUMN	NAME
10717	A	2	3-(2-ethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10717	A	3	3-[(thien-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10717	A	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10717	A	5	3-(4-fluorobenzylidenyl)-5,7-dibromo-2-indolinone
10717	A	6	3-[(indol-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10717	A	7	3-[(2-methylthien-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10717	A	8	3-(4-bromobenzylidenyl)-5,7-dibromo-2-indolinone
10717	A	9	3-[(pyrrol-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10717	A	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10717	A	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10717	B	2	3-(2-ethoxybenzylidenyl)-5-iodo-2-indolinone
10717	B	3	3-[(thien-2-yl)methylidenyl]-5-iodo-2-indolinone
10717	B	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5-iodo-2-indolinone
10717	B	5	3-(4-fluorobenzylidenyl)-5-iodo-2-indolinone
10717	B	6	3-[(indol-3-yl)methylidenyl]-5-iodo-2-indolinone

119  
Table 13  
(continued)

10717	B	7	3-[(2-methylthien-5-yl)methylidenyl]-5-iodo-2-indolinone
10717	B	8	3-(4-bromobenzylidenyl)-5-iodo-2-indolinone
10717	B	9	3-[(pyrrol-2-yl)methylidenyl]-5-iodo-2-indolinone
10717	B	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5-iodo-2-indolinone
10717	B	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10717	C	2	3-(2-ethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10717	C	3	3-[(thien-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10717	C	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10717	C	5	3-(4-fluorobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10717	C	6	3-[(indol-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10717	C	7	3-[(2-methylthien-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10717	C	8	3-(4-bromobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10717	C	9	3-[(pyrrol-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10717	C	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10717	C	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10717	D	2	3-(2-ethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone

120  
Table 13  
(continued)

10717	D	3	3-[(thien-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10717	D	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10717	D	5	3-(4-fluorobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10717	D	6	3-[(indol-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10717	D	7	3-[(2-methylthien-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10717	D	8	3-(4-bromobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10717	D	9	3-[(pyrrol-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10717	D	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10717	D	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10717	E	2	3-(2-ethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	3	3-[(thien-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	5	3-(4-fluorobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	6	3-[(indol-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	7	3-[(2-methylthien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	8	3-(4-bromobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10717	E	9	3-[(pyrrol-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	E	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10717	F	2	3-(2-ethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	3	3-[(thien-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	5	3-(4-fluorobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	6	3-[(indol-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	7	3-[(2-methylthien-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	8	3-(4-bromobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	9	3-[(pyrrol-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	F	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10717	G	2	3-(2-ethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10717	G	3	3-[(thien-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10717	G	4	3-[(1-methylpyrrol-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone



Table 13  
(continued)

10717	G	5	3-(4-fluorobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10717	G	6	3-[(indol-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10717	G	7	3-[(2-methylthien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10717	G	8	3-(4-bromobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10717	G	9	3-[(pyrrol-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10717	G	10	3-(2-hydroxy-6-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10717	G	11	3-[(3,4-dibromo-2-methylpyrrol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	A	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10718	A	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10718	A	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10718	A	5	3-[[2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4-(ethoxycarbonylmethyl)pyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10718	A	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10718	A	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10718	A	8	3-(4-chloro-3-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10718	A	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5,7-dibromo-2-indolinone
10718	A	10	3-[(furan-2-yl)methylidenyl]-5,7-dibromo-2-indolinone

123

Table 13  
(continued)

10718	A	11	3-[(2-nitrofuranyl)methylidenyl]-5,7-dibromo-2-indolinone
10718	B	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10718	B	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5-iodo-2-indolinone
10718	B	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5-iodo-2-indolinone
10718	B	5	3-[(2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4-(ethoxycarbonylmethyl)pyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10718	B	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5-iodo-2-indolinone
10718	B	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5-iodo-2-indolinone
10718	B	8	3-(4-chloro-3-nitrobenzylidenyl)-5-iodo-2-indolinone
10718	B	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5-iodo-2-indolinone
10718	B	10	3-[(furan-2-yl)methylidenyl]-5-iodo-2-indolinone
10718	B	11	3-[(2-nitrofuranyl)methylidenyl]-5-iodo-2-indolinone
10718	C	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10718	C	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10718	C	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10718	C	5	3-[(2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4-(ethoxycarbonylmethyl)pyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10718	C	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10718	C	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10718	C	8	3-(4-chloro-3-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10718	C	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10718	C	10	3-[(furan-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10718	C	11	3-[(2-nitrofuran-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10718	D	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	D	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10718	D	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	D	5	3-[[2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4-(ethoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	D	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	D	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	D	8	3-(4-chloro-3-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10718	D	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10718	D	10	3-[(furan-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	D	11	3-[(2-nitrofuran-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10718	E	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10718	E	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	5	3-[(2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4-ethoxycarbonylmethyl-pyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	8	3-(4-chloro-3-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	10	3-[(furan-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	E	11	3-[(2-nitrofuran-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10718	F	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	5	3-[(2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4-ethoxycarbonylmethyl)pyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	8	3-(4-chloro-3-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone

Table 13  
(continued)

10718	F	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	10	3-[(furan-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	F	11	3-[(2-nitrofur-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10718	G	2	3-[(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	G	3	3-(3-bromo-2-hydroxy-5-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10718	G	4	3-[(1-hydroxynaph-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	G	5	3-[[2-ethoxycarbonyl-3-(2-ethoxycarbonyl)ethyl-4(ethoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	G	6	3-[(2-methyl-3-ethoxycarbonylfuran-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	G	7	3-[(2,3-dimethoxycarbonyl-5-methylpyrrol-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	G	8	3-(4-chloro-3-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10718	G	9	3-(2,4-dihydroxy-3-methylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10718	G	10	3-[(furan-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10718	G	11	3-[(2-nitrofur-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10719	A	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	3	3-(3,4-dihydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	4	3-(2,4-dimethoxybenzylidenyl)-5,7-dibromo-2-indolinone

127  
Table 13  
(continued)

10719	A	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10719	A	6	3-(2,4,6-trimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	7	3-(4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	8	3-(4-dimethylaminobenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	9	3-(2-chloro-4-fluorobenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	10	3-(3-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10719	A	11	3-[4-fluoro-2-(trifluoromethyl)benzylidenyl]-5,7-dibromo-2-indolinone
10719	B	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5-iodo-2-indolinone
10719	B	3	3-(3,4-dihydroxybenzylidenyl)-5-iodo-2-indolinone
10719	B	4	3-(2,4-dimethoxybenzylidenyl)-5-iodo-2-indolinone
10719	B	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10719	B	6	3-(2,4,6-trimethoxybenzylidenyl)-5-iodo-2-indolinone
10719	B	7	3-(4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10719	B	8	3-(4-dimethylaminobenzylidenyl)-5-iodo-2-indolinone
10719	B	9	3-(2-chloro-4-fluorobenzylidenyl)-5-iodo-2-indolinone
10719	B	10	3-(3-nitrobenzylidenyl)-5-iodo-2-indolinone

Table 13  
(continued)

10719	B	11	3-[4-fluoro-2-(trifluoromethyl)benzylidenyl]-5-iodo-2-indolinone
10719	C	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	3	3-(3,4-dihydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	4	3-(2,4-dimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10719	C	6	3-(2,4,6-trimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	7	3-(4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	8	3-(4-dimethylaminobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	9	3-(2-chloro-4-fluorobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	10	3-(3-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10719	C	11	3-[4-fluoro-2-(trifluoromethyl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10719	D	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	3	3-(3,4-dihydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	4	3-(2,4-dimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10719	D	6	3-(2,4,6-trimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone

Table 13  
(continued)

10719	D	7	3-(4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	8	3-(4-dimethylaminobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	9	3-(2-chloro-4-fluorobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	10	3-(3-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10719	D	11	3-[4-fluoro-2-(trifluoromethyl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10719	E	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	3	3-(3,4-dihydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	4	3-(2,4-dimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	6	3-(2,4,6-trimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	7	3-(4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	8	3-(4-dimethylaminobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	9	3-(2-chloro-4-fluorobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	10	3-(3-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	E	11	3-[4-fluoro-2-(trifluoromethyl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10719	F	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone



Table 13  
(continued)

10719	F	3	3-(3,4-dihydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	4	3-(2,4-dimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	6	3-(2,4,6-trimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	7	3-(4-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	8	3-(4-dimethylaminobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	9	3-(2-chloro-4-fluorobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	10	3-(3-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	F	11	3-[4-fluoro-2-(trifluoromethyl)benzylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10719	G	2	3-(4-ethoxy-3-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	3	3-(3,4-dihydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	4	3-(2,4-dimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	5	3-[(2,4-dimethyl-3-ethylpyrrol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10719	G	6	3-(2,4,6-trimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	7	3-(4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	8	3-(4-dimethylaminobenzylidenyl)-5-(2-chloroethyl)-2-indolinone

131  
Table 13  
(continued)

10719	G	9	3-(2-chloro-4-fluorobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	10	3-(3-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10719	G	11	3-{4-fluoro-2-(trifluoromethyl)benzylidenyl}-5-(2-chloroethyl)-2-indolinone
10720	A	2	3-(2,4,6-trifluorobenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	4	3-(3,4-dimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	5	3-(2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	6	3-benzylidenyl-5,7-dibromo-2-indolinone
10720	A	7	3-[(2-methylmercaptobenzo-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10720	A	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10720	A	11	3-[(imidazol-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10720	B	2	3-(2,4,6-trifluorobenzylidenyl)-5-iodo-2-indolinone
10720	B	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5-iodo-2-indolinone
10720	B	4	3-(3,4-dimethoxybenzylidenyl)-5-iodo-2-indolinone

Table 13  
(continued)

10720	B	5	3-(2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10720	B	6	3-benzylidenyl-5-iodo-2-indolinone
10720	B	7	3-[(2-methylmercaptothien-5-yl)methylidenyl]-5-iodo-2-indolinone
10720	B	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5-iodo-2-indolinone
10720	B	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10720	B	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5-iodo-2-indolinone
10720	B	11	3-[(imidazol-2-yl)methylidenyl]-5-iodo-2-indolinone
10720	C	2	3-(2,4,6-trifluorobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10720	C	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10720	C	4	3-(3,4-dimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10720	C	5	3-(2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10720	C	6	3-benzylidenyl-5-bromo-4-methyl-2-indolinone
10720	C	7	3-[(2-methylmercaptothien-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10720	C	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10720	C	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10720	C	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone

133  
Table 13  
(continued)

10720	C	11	3-[(imidazol-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10720	D	2	3-(2,4,6-trifluorobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	4	3-(3,4-dimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	5	3-(2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	6	3-benzylidenyl-5-methylaminosulfonyl-2-indolinone
10720	D	7	3-[(2-methylmercaptothien-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10720	D	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10720	D	11	3-[(imidazol-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10720	E	2	3-(2,4,6-trifluorobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	4	3-(3,4-dimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	5	3-(2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	6	3-benzylidenyl-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10720	E	7	3-[(2-methylmercaptothien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	E	11	3-[(imidazol-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10720	F	2	3-(2,4,6-trifluorobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	4	3-(3,4-dimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	5	3-(2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	6	3-benzylidenyl-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	7	3-[(2-methylmercaptothien-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	F	11	3-[(imidazol-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10720	G	2	3-(2,4,6-trifluorobenzylidenyl)-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10720	G	3	3-(4-hydroxy-2-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10720	G	4	3-(3,4-dimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10720	G	5	3-(2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10720	G	6	3-benzylidenyl-5-(2-chloroethyl)-2-indolinone
10720	G	7	3-[(2-methylmercaptothien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10720	G	8	3-(2,4-dihydroxy-6-methylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10720	G	9	3-(3-ethoxy-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10720	G	10	3-(2-hydroxy-5-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10720	G	11	3-[(imidazol-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	A	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10721	A	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10721	A	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10721	A	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10721	A	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10721	A	7	3-[(2-chlorothien-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10721	A	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone

Table 13  
(continued)

10721	A	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10721	A	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10721	A	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10721	B	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5-iodo-2-indolinone
10721	B	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5-iodo-2-indolinone
10721	B	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5-iodo-2-indolinone
10721	B	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5-iodo-2-indolinone
10721	B	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5-iodo-2-indolinone
10721	B	7	3-[(2-chlorothien-5-yl)methylidenyl]-5-iodo-2-indolinone
10721	B	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10721	B	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10721	B	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10721	B	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10721	C	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10721	C	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10721	C	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone

137  
Table 13  
(continued)

10721	C	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10721	C	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10721	C	7	3-[(2-chlorothien-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10721	C	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10721	C	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10721	C	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10721	C	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10721	D	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10721	D	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10721	D	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10721	D	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10721	D	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10721	D	7	3-[(2-chlorothien-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10721	D	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10721	D	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10721	D	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone



Table 13  
(continued)

10721	D	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10721	E	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	7	3-[(2-chlorothien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	E	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10721	F	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone

Table 13  
(continued)

10721	F	7	3-[(2-chlorothien-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	F	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10721	G	2	3-[(1-methylbenzimidazol-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	G	3	3-[(4-chloro-1-methylpyrazol-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	G	4	3-[(2,3-dimethylthien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	G	5	3-[(4,5,6,7-tetrahydroindol-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	G	6	3-(3-chloromethyl-2-hydroxy-5-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10721	G	7	3-[(2-chlorothien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	G	8	3-[(2,4-dimethylpyrrol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10721	G	9	3-(3-t-butyl-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10721	G	10	3-(3-bromo-5-t-butyl-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10721	G	11	3-(3,5-di-t-butyl-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	A	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5,7-dibromo-2-indolinone

Table 13  
(continued)

10722	A	3	3-(2,4,6-trihydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10722	A	4	3-[(2-nitrothien-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10722	A	5	3-(4-carboxybenzylidenyl)-5,7-dibromo-2-indolinone
10722	A	6	3-(2,4-difluorobenzylidenyl)-5,7-dibromo-2-indolinone
10722	A	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10722	A	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10722	A	9	3-[(2-nitrothien-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10722	A	10	3-(4-di-n-butylaminobenzylidenyl)-5,7-dibromo-2-indolinone
10722	A	11	3-(4-(trifluoromethyl)benzylidenyl)-5,7-dibromo-2-indolinone
10722	B	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5-iodo-2-indolinone
10722	B	3	3-(2,4,6-trihydroxybenzylidenyl)-5-iodo-2-indolinone
10722	B	4	3-[(2-nitrothien-5-yl)methylidenyl]-5-iodo-2-indolinone
10722	B	5	3-(4-carboxybenzylidenyl)-5-iodo-2-indolinone
10722	B	6	3-(2,4-difluorobenzylidenyl)-5-iodo-2-indolinone
10722	B	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10722	B	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5-iodo-2-indolinone

141  
Table 13  
(continued)

10722	B	9	3-((2-nitrothien-4-yl)methylidenyl)-5-iodo-2-indolinone
10722	B	10	3-(4-di-n-butylaminobenzylidenyl)-5-iodo-2-indolinone
10722	B	11	3-[4-(trifluoromethyl)benzylidenyl]-5-iodo-2-indolinone
10722	C	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	3	3-(2,4,6-trihydroxybenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	4	3-((2-nitrothien-5-yl)methylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	5	3-(4-carboxybenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	6	3-(2,4-difluorobenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	9	3-((2-nitrothien-4-yl)methylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	10	3-(4-di-n-butylaminobenzylidenyl)-5-dibromo-4-methyl-2-indolinone
10722	C	11	3-[4-(trifluoromethyl)benzylidenyl]-5-dibromo-4-methyl-2-indolinone
10722	D	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	3	3-(2,4,6-trihydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	4	3-((2-nitrothien-5-yl)methylidenyl)-5-methylaminosulfonyl-2-indolinone

Table 13  
(continued)

10722	D	5	3-(4-carboxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	6	3-(2,4-difluorobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	9	3-[(2-nitrothien-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10722	D	10	3-(4-di-n-butylaminobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10722	D	11	3-[4-(trifluoromethyl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10722	E	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	3	3-(2,4,6-trihydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	4	3-[(2-nitrothien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	5	3-(4-carboxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	6	3-(2,4-difluorobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	9	3-[(2-nitrothien-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	E	10	3-(4-di-n-butylaminobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10722	E	11	3-[4-(trifluoromethyl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10722	F	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	3	3-(2,4,6-trihydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	4	3-[(2-nitrothien-5-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	5	3-(4-carboxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	6	3-(2,4-difluorobenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	9	3-[(2-nitrothien-4-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	10	3-(4-di-n-butylaminobenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	F	11	3-[4-(trifluoromethyl)benzylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10722	G	2	3-(3-t-butyl-4-hydroxy-5-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	G	3	3-(2,4,6-trihydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	G	4	3-[(2-nitrothien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10722	G	5	3-(4-carboxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	G	6	3-(2,4-difluorobenzylidenyl)-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10722	G	7	3-(3,5-dimethyl-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	G	8	3-(3-t-butyl-5-chloro-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	G	9	3-[(2-nitrothien-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10722	G	10	3-(4-di-n-butylaminobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10722	G	11	3-[4-(trifluoromethyl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10723	A	2	3-(2,3,4-trihydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	5	3-(3,4-diacetoxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	6	3-(4-hydroxy-3-methylbenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	7	3-(2-bromobenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	8	3-(2,4-dihydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	10	3-(3-bromobenzylidenyl)-5,7-dibromo-2-indolinone
10723	A	11	3-(3,5-di-t-butyl-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10723	B	2	3-(2,3,4-trihydroxybenzylidenyl)-5-iodo-2-indolinone

145  
Table 13  
(continued)

10723	B	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5-iodo-2-indolinone
10723	B	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5-iodo-2-indolinone
10723	B	5	3-(3,4-diacetoxybenzylidenyl)-5-iodo-2-indolinone
10723	B	6	3-(4-hydroxy-3-methylbenzylidenyl)-5-iodo-2-indolinone
10723	B	7	3-(2-bromobenzylidenyl)-5-iodo-2-indolinone
10723	B	8	3-(2,4-dihydroxybenzylidenyl)-5-iodo-2-indolinone
10723	B	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10723	B	10	3-(3-bromobenzylidenyl)-5-iodo-2-indolinone
10723	B	11	3-(3,5-di-t-butyl-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10723	C	2	3-(2,3,4-trihydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	5	3-(3,4-diacetoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	6	3-(4-hydroxy-3-methylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	7	3-(2-bromobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	8	3-(2,4-dihydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone



Table 13  
(continued)

10723	C	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	10	3-(3-bromobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	C	11	3-(3,5-di-t-butyl-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10723	D	2	3-(2,3,4-trihydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	5	3-(3,4-diacetoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	6	3-(4-hydroxy-3-methylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	7	3-(2-bromobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	8	3-(2,4-dihydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	10	3-(3-bromobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	D	11	3-(3,5-di-t-butyl-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10723	E	2	3-(2,3,4-trihydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10723	E	5	3-(3,4-diacetoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	6	3-(4-hydroxy-3-methylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	7	3-(2-bromobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	8	3-(2,4-dihydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	10	3-(3-bromobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	E	11	3-(3,5-di- <i>t</i> -butyl-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10723	F	2	3-(2,3,4-trihydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	5	3-(3,4-diacetoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	6	3-(4-hydroxy-3-methylbenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	7	3-(2-bromobenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	8	3-(2,4-dihydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	F	10	3-(3-bromobenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone

Table 13  
(continued)

10723	F	11	3-(3,5-di-t-butyl-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10723	G	2	3-(2,3,4-trihydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	3	3-(2-hydroxy-3-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	4	3-(3-bromo-4,5-dihydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	5	3-(3,4-diacetoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	6	3-(4-hydroxy-3-methylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	7	3-(2-bromobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	8	3-(2,4-dihydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	9	3-(2-hydroxy-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	10	3-(3-bromobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10723	G	11	3-(3,5-di-t-butyl-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10724	A	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10724	A	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10724	A	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10724	A	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[j]quinolizin-9-yl)methylidenyl]-5,7-dibromo-2-indolinone
10724	A	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone

Table 13  
(continued)

10724	A	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10724	A	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5,7-dibromo-2-indolinone
10724	A	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10724	A	11	3-[(3,4-dimethylthieno[2,3-b]thien-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10724	B	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5-iodo-2-indolinone
10724	B	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5-iodo-2-indolinone
10724	B	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5-iodo-2-indolinone
10724	B	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylidenyl]-5-iodo-2-indolinone
10724	B	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10724	B	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5-iodo-2-indolinone
10724	B	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5-iodo-2-indolinone
10724	B	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5-iodo-2-indolinone
10724	B	11	3-[(3,4-dimethylthieno[2,3-b]thien-2-yl)methylidenyl]-5-iodo-2-indolinone
10724	C	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10724	C	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10724	C	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10724	C	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10724	C	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10724	C	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10724	C	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5-bromo-4-methyl-2-indolinone
10724	C	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10724	C	11	3-[(3,4-dimethylthieno[2,3-b]thien-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10724	D	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10724	D	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10724	D	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10724	D	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10724	D	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10724	D	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10724	D	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5-methylaminosulfonyl-2-indolinone
10724	D	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10724	D	11	3-[(3,4-dimethylthieno[2,3-b]thien-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10724	E	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10724	E	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	E	11	3-[(3,4-dimethylthieno[2,3-b]thien-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10724	F	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylidenyl]-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5-(morpholin-1yl)aminosulfonyl-2-indolinone
10724	F	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5-(morpholin-1yl)aminosulfonyl-2-indolinone

Table 13  
(continued)

10724	F	11	3-[(3,4-dimethylthieno[2,3-b]thi n-2-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10724	G	2	3-[(1-dimethylaminonaph-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10724	G	3	3-(4-hydroxy-3-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10724	G	4	3-(3-hydroxy-4-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10724	G	5	3-[(8-hydroxy-2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10724	G	6	3-(3,5-diisopropyl-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10724	G	7	3-[(benzo[b]furan-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10724	G	9	3-[[1-(4-chlorophenyl)pyrrol-2-yl]methylidenyl]-5-(2-chloroethyl)-2-indolinone
10724	G	10	3-[(2-ethylfuran-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10724	G	11	3-[(3,4-dimethylthieno[2,3-b]thien-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	A	2	3-[(3-bromothien-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10725	A	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10725	A	4	3-[(2-methylfuran-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10725	A	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10725	A	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5,7-dibromo-2-indolinone
10725	A	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5,7-dibromo-2-indolinone

Table 13  
(continued)

10725	A	8	3-[4-(morpholin-1-yl)benzylidenyl]-5,7-dibromo-2-indolinone
10725	A	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5,7-dibromo-4-methyl-2-indolinone
10725	A	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5,7-dibromo-4-methyl-2-indolinone
10725	A	11	3-[(imidazol-4-yl)methylidenyl]-5,7-dibromo-4-methyl-2-indolinone
10725	B	2	3-[(3-bromothien-2-yl)methylidenyl]-5-iodo-2-indolinone
10725	B	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5-iodo-2-indolinone
10725	B	4	3-[(2-methylfuran-5-yl)methylidenyl]-5-iodo-2-indolinone
10725	B	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5-iodo-2-indolinone
10725	B	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5-iodo-2-indolinone
10725	B	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5-iodo-2-indolinone
10725	B	8	3-[4-(morpholin-1-yl)benzylidenyl]-5-iodo-2-indolinone
10725	B	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-iodo-2-indolinone
10725	B	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5-iodo-2-indolinone
10725	B	11	3-[(imidazol-4-yl)methylidenyl]-5-iodo-2-indolinone
10725	C	2	3-[(3-bromothien-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone



Table 13  
(continued)

10725	C	4	3-[(2-methylfuran-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10725	C	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	8	3-[4-(morpholin-1-yl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5-bromo-4-methyl-2-indolinone
10725	C	11	3-[(imidazol-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10725	D	2	3-[(3-bromothien-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	D	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10725	D	4	3-[(2-methylfuran-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	D	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	D	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10725	D	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	D	8	3-[4-(morpholin-1-yl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	D	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-methylaminosulfonyl-2-indolinone

Table 13  
(continued)

10725	D	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	D	11	3-[(imidazol-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10725	E	2	3-[(3-bromothien-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	4	3-[(2-methylfuran-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	8	3-[4-(morpholin-1-yl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	E	11	3-[(imidazol-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10725	F	2	3-[(3-bromothien-2-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	4	3-[(2-methylfuran-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone

Table 13  
(continued)

10725	F	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	8	3-[4-(morpholin-1-yl)benzylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	F	11	3-[(imidazol-4-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10725	G	2	3-[(3-bromothien-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	3	3-(2-bromo-6-hydroxy-5-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10725	G	4	3-[(2-methylfuran-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	5	3-[(3-methylpyrazol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	6	3-(2-hydroxy-6-methoxy-4-methylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10725	G	7	3-[4-(4-formylpiperazin-1-yl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	8	3-[4-(morpholin-1-yl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	9	3-[[2-chloro-4-methoxycarbonyl-3-(methoxycarbonylmethyl)pyrrol-5-yl]methylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	10	3-[[4-bromo-2-(4-chlorophenyl)pyrazol-3-yl]methylidenyl]-5-(2-chloroethyl)-2-indolinone
10725	G	11	3-[(imidazol-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10726	A	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10726	A	4	3-(3-t-butyl-4-hydroxy-5-methylbenzylidenyl)-5,7-dibromo-2-indolinone
10726	A	5	3-[(2-bromofuran-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10726	A	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10726	A	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5,7-dibromo-2-indolinone
10726	A	8	3-(5-fluoro-2-oxindol-3-idenyl)-5,7-dibromo-2-indolinone
10726	A	9	3-(2-oxindol-3-idenyl)-5,7-dibromo-2-indolinone
10726	A	10	3-[(2-ethylthien-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10726	A	11	3-(4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10726	B	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10726	B	4	3-(3-t-butyl-4-hydroxy-5-methylbenzylidenyl)-5-iodo-2-indolinone
10726	B	5	3-[(2-bromofuran-5-yl)methylidenyl]-5-iodo-2-indolinone
10726	B	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5-iodo-2-indolinone
10726	B	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5-iodo-2-indolinone
10726	B	8	3-(5-fluoro-2-oxindol-3-idenyl)-5-iodo-2-indolinone
10726	B	9	3-[(2-oxindol-3-idenyl)methylidenyl]-5-iodo-2-indolinone

Table 13  
(continued)

10726	B	10	3-[(2-ethylthien-5-yl)methylidenyl]-5-iodo-2-indolinone
10726	B	11	3-(4-methoxybenzylidenyl)-5-iodo-2-indolinone
10726	C	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10726	C	4	3-(3-t-butyl-4-hydroxy-5-methylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10726	C	5	3-[(2-bromofuran-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10726	C	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10726	C	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10726	C	8	3-(5-fluoro-2-oxindol-3-idenyl)-5-bromo-4-methyl-2-indolinone
10726	C	9	3-(2-oxindol-3-idenyl)-5-bromo-4-methyl-2-indolinone
10726	C	10	3-[(2-ethylthien-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10726	C	11	3-(4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10726	D	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10726	D	4	3-(3-t-butyl-4-hydroxy-5-methylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10726	D	5	3-[(2-bromofuran-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10726	D	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10726	D	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone

159  
Table 13  
(continued)

10726	D	8	3-(5-fluoro-2-oxindol-3-idenyl)-5-methylaminosulfonyl-2-indolinone
10726	D	9	3-(2-oxindol-3-idenyl)-5-methylaminosulfonyl-2-indolinone
10726	D	10	3-[(2-ethylthien-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10726	D	11	3-(4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10726	E	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	4	3-(3-t-butyl-4-hydroxy-5-methylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	5	3-[(2-bromofuran-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	8	3-(5-fluoro-2-oxindol-3-idenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	9	3-(2-oxindol-3-idenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	10	3-[(2-ethylthien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	E	11	3-(4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10726	F	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	4	3-(3-t-butyl-4-hydroxy-5-methylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	5	3-[(2-bromofuran-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone

Table 13  
(continued)

10726	F	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	8	3-(5-fluoro-2-oxindol-3-idenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	9	3-(2-oxindol-3-idenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	10	3-[(2-ethylthien-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	F	11	3-(4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10726	G	3	3-[(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10726	G	4	3-(3- <i>t</i> -butyl-4-hydroxy-5-methylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10726	G	5	3-[(2-bromofuran-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10726	G	6	3-[(1,3-dimethylpyrrol-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10726	G	7	3-[(5,8-dihydroxy-1,2,3,4-tetrahydronaph-6-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10726	G	8	3-(5-fluoro-2-oxindol-3-idenyl)-5-(2-chloroethyl)-2-indolinone
10726	G	9	3-(2-oxindol-3-idenyl)-5-(2-chloroethyl)-2-indolinone
10726	G	10	3-[(2-ethylthien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10726	G	11	3-(4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10727	A	2	3-(4-diethylaminobenzylidenyl)-5,7-dibromo-2-indolinone

Table 13  
(continued)

10727	A	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10727	A	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10727	A	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5,7-dibromo-2-indolinone
10727	A	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5,7-dibromo-2-indolinone
10727	A	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10727	A	8	3-(3-cyanobenzylidenyl)-5,7-dibromo-2-indolinone
10727	A	9	3-(4-cyanobenzylidenyl)-5,7-dibromo-2-indolinone
10727	A	10	3-(2,5-dihydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10727	A	11	3-(2,3-dimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10727	B	2	3-(4-diethylaminobenzylidenyl)-5-iodo-2-indolinone
10727	B	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5-iodo-2-indolinone
10727	B	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10727	B	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5-iodo-2-indolinone
10727	B	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5-iodo-2-indolinone
10727	B	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5-iodo-2-indolinone
10727	B	8	3-(3-cyanobenzylidenyl)-5-iodo-2-indolinone



Table 13  
(continued)

10727	B	9	3-(4-cyanobenzylidenyl)-5-iodo-2-indolinone
10727	B	10	3-(2,5-dihydroxybenzylidenyl)-5-iodo-2-indolinone
10727	B	11	3-(2,3-dimethoxybenzylidenyl)-5-iodo-2-indolinone
10727	C	2	3-(4-diethylaminobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10727	C	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10727	C	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10727	C	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10727	C	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10727	C	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10727	C	8	3-(3-cyanobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10727	C	9	3-(4-cyanobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10727	C	10	3-(2,5-dihydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10727	C	11	3-(2,3-dimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10727	D	2	3-(4-diethylaminobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10727	D	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10727	D	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone

163  
Table 13  
(continued)

10727	D	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10727	D	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10727	D	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10727	D	8	3-(3-cyanobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10727	D	9	3-(4-cyanobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10727	D	10	3-(2,5-dihydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10727	D	11	3-(2,3-dimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10727	E	2	3-(4-diethylaminobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	8	3-(3-cyanobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	9	3-(4-cyanobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	E	10	3-(2,5-dihydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10727	E	11	3-(2,3-dimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10727	F	2	3-(4-diethylaminobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	8	3-(3-cyanobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	9	3-(4-cyanobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	10	3-(2,5-dihydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	F	11	3-(2,3-dimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10727	G	2	3-(4-diethylaminobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10727	G	3	3-[(2,4-diethylpyrrol-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10727	G	4	3-(3-bromo-5-chloro-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10727	G	5	3-[2-(4-chlorophenylmercapto)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10727	G	6	3-[(5-chlorobenzodioxolan-6-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10727	G	7	3-[(1,4-benzopyranon-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10727	G	8	3-(3-cyanobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10727	G	9	3-(4-cyanobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10727	G	10	3-(2,5-dihydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10727	G	11	3-(2,3-dimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10728	A	2	3-(2,5-dimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10728	A	3	3-(2,6-dimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10728	A	4	3-(3,5-dimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10728	A	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10728	A	6	3-[(fluoren-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10728	A	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5,7-dibromo-2-indolinone
10728	A	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5,7-dibromo-2-indolinone
10728	A	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5,7-dibromo-2-indolinone
10728	A	10	3-(2-carboxymethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10728	A	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5,7-dibromo-2-indolinone
10728	B	2	3-(2,5-dimethoxybenzylidenyl)-5-iodo-2-indolinone

Table 13  
(continued)

10728	B	3	3-(2,6-dimethoxybenzylidenyl)-5-iodo-2-indolinone
10728	B	4	3-(3,5-dimethoxybenzylidenyl)-5-iodo-2-indolinone
10728	B	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5-iodo-2-indolinone
10728	B	6	3-[(fluoren-2-yl)methylidenyl]-5-iodo-2-indolinone
10728	B	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5-iodo-2-indolinone
10728	B	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5-iodo-2-indolinone
10728	B	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5-iodo-2-indolinone
10728	B	10	3-(2-carboxymethoxybenzylidenyl)-5-iodo-2-indolinone
10728	B	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5-iodo-2-indolinone
10728	C	2	3-(2,5-dimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10728	C	3	3-(2,6-dimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10728	C	4	3-(3,5-dimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10728	C	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10728	C	6	3-[(fluoren-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10728	C	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10728	C	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10728	C	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10728	C	10	3-(2-carboxymethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10728	C	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10728	D	2	3-(2,5-dimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10728	D	3	3-(2,6-dimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10728	D	4	3-(3,5-dimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10728	D	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10728	D	6	3-[(fluoren-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10728	D	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10728	D	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10728	D	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10728	D	10	3-(2-carboxymethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10728	D	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10728	E	2	3-(2,5-dimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	3	3-(2,6-dimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	4	3-(3,5-dimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10728	E	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	6	3-[(fluoren-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	10	3-(2-carboxymethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	E	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10728	F	2	3-(2,5-dimethoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	3	3-(2,6-dimethoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	4	3-(3,5-dimethoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	6	3-[(fluoren-2-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	F	10	3-(2-carboxymethoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone

Table 13  
(continued)

10728	F	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10728	G	2	3-(2,5-dimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10728	G	3	3-(2,6-dimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10728	G	4	3-(3,5-dimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10728	G	5	3-(4-dimethylamino-2-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10728	G	6	3-[(fluoren-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10728	G	7	3-[2-fluoro-3-(trifluoromethyl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10728	G	8	3-[2-fluoro-5-(trifluoromethyl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10728	G	9	3-[2-fluoro-6-(trifluoromethyl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone
10728	G	10	3-(2-carboxymethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10728	G	11	3-[(4-methoxybenzodioxolan-6-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	A	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	4	3-(4-methylmercaptobenzylidenyl)-5,7-dibromo-2-indolinone
10729	A	5	3-[(3-methylthien-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	6	3-(3-phenoxybenzylidenyl)-5,7-dibromo-2-indolinone



Table 13  
(continued)

10729	A	7	3-[(pyrid-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	8	3-[(pyrid-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	9	3-[(pyrid-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5,7-dibromo-2-indolinone
10729	A	11	3-[(cyclohexen-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	B	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	4	3-[4-methylmercaptobenzylidenyl]-5-iodo-2-indolinone
10729	B	5	3-[(3-methylthien-2-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	6	3-(3-phenoxybenzylidenyl)-5-iodo-2-indolinone
10729	B	7	3-[(pyrid-2-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	8	3-[(pyrid-3-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	9	3-[(pyrid-4-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-iodo-2-indolinone
10729	B	11	3-[(cyclohexen-3-yl)methylidenyl]-5-iodo-2-indolinone
10729	C	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10729	C	3	3-[(1-methoxynaphth-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	4	3-(4-methylmercaptobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10729	C	5	3-[(3-methylthien-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	6	3-(3-phenoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10729	C	7	3-[(pyrid-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	8	3-[(pyrid-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	9	3-[(pyrid-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	11	3-[(cyclohexen-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	D	2	3-[(2-methoxynaphth-1-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	3	3-[(1-methoxynaphth-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	4	3-(4-methylmercaptobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10729	D	5	3-[(3-methylthien-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	6	3-(3-phenoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10729	D	7	3-[(pyrid-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	8	3-[(pyrid-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone

Table 13  
(continued)

10729	A	7	3-[(pyrid-2-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	8	3-[(pyrid-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	9	3-[(pyrid-4-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	A	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5,7-dibromo-2-indolinone
10729	A	11	3-[(cyclohexen-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10729	B	2	3-[(2-methoxynaphth-1-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	3	3-[(1-methoxynaphth-4-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	4	3-(4-methylmercaptobenzylidenyl)-5-iodo-2-indolinone
10729	B	5	3-[(3-methylthien-2-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	6	3-(3-phenoxybenzylidenyl)-5-iodo-2-indolinone
10729	B	7	3-[(pyrid-2-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	8	3-[(pyrid-3-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	9	3-[(pyrid-4-yl)methylidenyl]-5-iodo-2-indolinone
10729	B	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-iodo-2-indolinone
10729	B	11	3-[(cyclohexen-3-yl)methylidenyl]-5-iodo-2-indolinone
10729	C	2	3-[(2-methoxynaphth-1-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10729	C	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	4	3-(4-methylmercaptobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10729	C	5	3-[(3-methylthien-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	6	3-(3-phenoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10729	C	7	3-[(pyrid-2-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	8	3-[(pyrid-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	9	3-[(pyrid-4-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-bromo-4-methyl-2-indolinone
10729	C	11	3-[(cyclohexen-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10729	D	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	4	3-(4-methylmercaptobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10729	D	5	3-[(3-methylthien-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	6	3-(3-phenoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10729	D	7	3-[(pyrid-2-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	8	3-[(pyrid-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone

Table 13  
(continued)

10729	D	9	3-[(pyrid-4-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	D	11	3-[(cyclohexen-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10729	E	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	4	3-[4-methylmercaptobenzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	5	3-[(3-methylthien-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	6	3-(3-phenoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	7	3-[(pyrid-2-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	8	3-[(pyrid-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	9	3-[(pyrid-4-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	E	11	3-[(cyclohexen-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10729	F	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	4	3-[4-methylmercaptobenzylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone

Table 13  
(continued)

10729	F	5	3-[(3-methylthien-2-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	6	3-(3-phenoxybenzylidenyl)-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	7	3-[(pyrid-2-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	8	3-[(pyrid-3-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	9	3-[(pyrid-4-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	F	11	3-[(cyclohexen-3-yl)methylidenyl]-5-(morpholin-1-yl)aminosulfonyl-2-indolinone
10729	G	2	3-[(2-methoxynaph-1-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	G	3	3-[(1-methoxynaph-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	G	4	3-(4-methylmercaptobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10729	G	5	3-[(3-methylthien-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	G	6	3-(3-phenoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10729	G	7	3-[(pyrid-2-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	G	8	3-[(pyrid-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	G	9	3-[(pyrid-4-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10729	G	10	3-[4-(pyrrolidin-1-yl)benzylidenyl]-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10729	G	11	3-[(cyclohexen-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	A	2	3-(2,3,4-trimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10730	A	3	3-(2,4,5-trimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10730	A	4	3-(3,4,5-trimethoxybenzylidenyl)-5,7-dibromo-2-indolinone
10730	A	5	3-[(1-acetylindol-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	A	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	A	7	3-[2-[(2-chlorophenyl)furan-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	A	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	A	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	A	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	A	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10730	B	2	3-(2,3,4-trimethoxybenzylidenyl)-5-iodo-2-indolinone
10730	B	3	3-(2,4,5-trimethoxybenzylidenyl)-5-iodo-2-indolinone
10730	B	4	3-(3,4,5-trimethoxybenzylidenyl)-5-iodo-2-indolinone
10730	B	5	3-[(1-acetylindol-3-yl)methylidenyl]-5-iodo-2-indolinone
10730	B	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5-iodo-2-indolinone

Table 13  
(continued)

10730	B	7	3-{2-[(2-chlorophenyl)furan-5-yl]methylidenyl}-5-iodo-2-indolinone
10730	B	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5-iodo-2-indolinone
10730	B	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5-iodo-2-indolinone
10730	B	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5-iodo-2-indolinone
10730	B	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5-iodo-2-indolinone
10730	C	2	3-(2,3,4-trimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10730	C	3	3-(2,4,5-trimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10730	C	4	3-(3,4,5-trimethoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10730	C	5	3-[(1-acetylindol-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10730	C	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10730	C	7	3-{2-[(2-chlorophenyl)furan-5-yl]methylidenyl}-5-bromo-4-methyl-2-indolinone
10730	C	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10730	C	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10730	C	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10730	C	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10730	D	2	3-(2,3,4-trimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone



Table 13  
(continued)

10730	D	3	3-(2,4,5-trimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10730	D	4	3-(3,4,5-trimethoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10730	D	5	3-[(1-acetylindol-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	D	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	D	7	3-[2-[(2-chlorophenyl)furan-5-yl]methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	D	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	D	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	D	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	D	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10730	E	2	3-(2,3,4-trimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	3	3-(2,4,5-trimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	4	3-(3,4,5-trimethoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	5	3-[(1-acetylindol-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	7	3-[2-[(2-chlorophenyl)furan-5-yl]methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10730	E	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	E	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10730	F	2	3-(2,3,4-trimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	3	3-(2,4,5-trimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	4	3-(3,4,5-trimethoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	5	3-[(1-acetylindol-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	7	3-[2-[(2-chlorophenyl)furan-5-yl]methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	F	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10730	G	2	3-(2,3,4-trimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10730	G	3	3-(2,4,5-trimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10730	G	4	3-(3,4,5-trimethoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10730	G	5	3-[(1-acetylindol-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	G	6	3-[(6-chloro-1,4-benzofuranon-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	G	7	3-[2-[(2-chlorophenyl)furan-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	G	8	3-[(2-chloroquinolin-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	G	9	3-[(6,8-dibromo-1,4-benzofuranon-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	G	10	3-[(2,5-dimethoxytetrahydrofuran-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10730	G	11	3-[(2,3-dimethylfuran-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	A	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	4	3-[[4-(propen-2-yl)cyclohexen-1-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5,7-dibromo-2-indolinone
10731	A	10	3-(1-methyl-2-oxindol-3-idenyl)-5,7-dibromo-2-indolinone

Table 13  
(continued)

10731	A	11	3-[2-{2-(nitrophenyl)furan-5-yl}methylidenyl]-5,7-dibromo-2-indolinone
10731	B	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	4	3-[[4-(propen-2-yl)cyclohexen-1-yl]methylidenyl]-5-iodo-2-indolinone
10731	B	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5-iodo-2-indolinone
10731	B	10	3-(1-methyl-2-oxindol-3-idenyl)-5-iodo-2-indolinone
10731	B	11	3-[2-{2-(nitrophenyl)furan-5-yl}methylidenyl]-5-iodo-2-indolinone
10731	C	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	4	3-[[4-(propen-2-yl)cyclohexen-1-yl]methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10731	C	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	C	10	3-(1-methyl-2-oxindol-3-idenyl)-5-bromo-4-methyl-2-indolinone
10731	C	11	3-[2-[2-(nitrophenyl)furan-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10731	D	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	4	3-[4-(propen-2-yl)cyclohexen-1-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	D	10	3-(1-methyl-2-oxindol-3-idenyl)-5-methylaminosulfonyl-2-indolinone
10731	D	11	3-[2-[2-(nitrophenyl)furan-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10731	E	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

Table 13  
(continued)

10731	E	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	4	3-[[4-(propen-2-yl)cyclohexen-1-yl]methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	10	3-[1-methyl-2-oxindol-3-idenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	E	11	3-[2-[2-(nitrophenyl)furan-5-yl]methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10731	F	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	4	3-[[4-(propen-2-yl)cyclohexen-1-yl]methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone

Table 13  
(continued)

10731	F	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	10	3-(1-methyl-2-oxindol-3-idenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	F	11	3-[2-[2-(nitrophenyl)furan-5-yl]methylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone
10731	G	2	3-[(9-ethylcarbazol-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	3	3-[(6,7-dimethyl-1,4-benzopyron-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	4	3-[4-(propen-2-yl)cyclohexen-1-yl]methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	5	3-[(6-isopropyl-1,4-benzopyron-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	6	3-[(6-methyl-1,4-benzopyron-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	7	3-[(6-nitro-1,4-benzopyron-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	8	3-[(pyrimid-2,4-dion-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	9	3-[(5-methoxyindol-3-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone
10731	G	10	3-(1-methyl-2-oxindol-3-idenyl)-5-(2-chloroethyl)-2-indolinone
10731	G	11	3-[2-[2-(nitrophenyl)furan-5-yl]methylidenyl]-5-(2-chloroethyl)-2-indolinone
10732	A	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5,7-dibromo-2-indolinone
10732	A	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5,7-dibromo-2-indolinone

185  
Table 13  
(continued)

10732	A	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	10	3-(4-benzyloxy-5-t-butyl-3-chlorobenzylidenyl)-5,7-dibromo-2-indolinone
10732	A	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10732	B	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5-iodo-2-indolinone
10732	B	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10732	B	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5-iodo-2-indolinone
10732	B	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10732	B	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5-iodo-2-indolinone
10732	B	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10732	B	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5-iodo-2-indolinone
10732	B	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10732	B	10	3-(4-benzyloxy-5-t-butyl-3-chlorobenzylidenyl)-5-iodo-2-indolinone



Table 13  
(continued)

10732	B	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10732	C	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5-bromo-4-methyl-2-indolinone
10732	C	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	10	3-(4-benzyloxy-5-t-butyl-3-chlorobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	C	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10732	D	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5-methylaminosulfonyl-2-indolinone
10732	D	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone

187  
Table 13  
(continued)

10732	D	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	10	3-(4-benzyloxy-5-t-butyl-3-chlorobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	D	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10732	E	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	10	3-(4-benzyloxy-5-t-butyl-3-chlorobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	E	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10732	F	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5-(morpholin-1-yl)sulfonyl-2-indolinone

Table 13  
(continued)

10732	F	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	10	3-(4-benzyloxy-5-t-butyl-3-chloro-benzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	F	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10732	G	2	3-[2-(thien-2-yl)-2-(trifluoromethyl)ethylidenyl]-5-(2-chloroethyl)-2-indolinone
10732	G	3	3-(3,5-diisopropyl-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	4	3-(3,5-diisopropyl-4-phenoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	5	3-(3-t-butyl-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	6	3-(4-benzyloxy-3-t-butylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	7	3-(3-bromo-5-t-butyl-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	8	3-(4-benzyloxy-3-bromo-5-t-butylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10732	G	9	3-(3-t-butyl-5-chloro-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	10	3-(4-benzyloxy-5-t-butyl-3-chlorobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10732	G	11	3-(3-t-butyl-5-iodo-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	A	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	9	3-(5-bromo-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10733	A	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10733	B	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5-iodo-2-indolinone
10733	B	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5-iodo-2-indolinone
10733	B	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5-iodo-2-indolinone

Table 13  
(continued)

10733	B	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5-iodo-2-indolinone
10733	B	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5-iodo-2-indolinone
10733	B	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5-iodo-2-indolinone
10733	B	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5-iodo-2-indolinone
10733	B	9	3-(5-bromo-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10733	B	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5-iodo-2-indolinone
10733	B	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5-iodo-2-indolinone
10733	C	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	9	3-(5-bromo-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	C	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone

Table 13  
(continued)

10733	C	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10733	D	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	9	3-(5-bromo-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	D	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10733	E	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone

192  
Table 13  
(continued)

10733	E	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	9	3-(5-bromo-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	E	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10733	F	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	9	3-(5-bromo-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	F	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10733	G	2	3-(4-benzyloxy-3-t-butyl-5-iodobenzylidenyl)-5-(2-chloroethyl)-2-indolinone

Table 13  
(continued)

10733	G	3	3-(3-t-butyl-4-methoxy-5-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	4	3-(3,5-di-t-butyl-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	5	3-(4-benzyloxy-3,5-di-t-butylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	6	3-(3,5-dimethyl-4-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	7	3-(4-benzyloxy-3,5-dimethylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	8	3-(5-bromo-2-hydroxy-3-methoxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	9	3-(5-bromo-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	10	3-(2-hydroxy-5-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10733	G	11	3-(4-hydroxy-3-methoxy-2-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	A	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	4	3-(5-chloro-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	6	3-(4-nitrobenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone



194  
Table 13  
(continued)

10734	A	9	3-(3-bromo-4-hydroxybenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	10	3-(4-t-butylbenzylidenyl)-5,7-dibromo-2-indolinone
10734	A	11	3-[(2-bromothien-5-yl)methylidenyl]-5,7-dibromo-2-indolinone
10734	B	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	4	3-(5-chloro-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	6	3-(4-nitrobenzylidenyl)-5-iodo-2-indolinone
10734	B	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	9	3-(3-bromo-4-hydroxybenzylidenyl)-5-iodo-2-indolinone
10734	B	10	3-(4-t-butylbenzylidenyl)-5-iodo-2-indolinone
10734	B	11	3-[(2-bromothien-5-yl)methylidenyl]-5-iodo-2-indolinone
10734	C	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	4	3-(5-chloro-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone

195  
Table 13  
(continued)

10734	C	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	6	3-(4-nitrobenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	9	3-(3-bromo-4-hydroxybenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	10	3-(4- <i>t</i> -butylbenzylidenyl)-5-bromo-4-methyl-2-indolinone
10734	C	11	3-[(2-bromothien-5-yl)methylidenyl]-5-bromo-4-methyl-2-indolinone
10734	D	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	4	3-(5-chloro-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	6	3-(4-nitrobenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	9	3-(3-bromo-4-hydroxybenzylidenyl)-5-methylaminosulfonyl-2-indolinone
10734	D	10	3-(4- <i>t</i> -butylbenzylidenyl)-5-methylaminosulfonyl-2-indolinone

Table 13  
(continued)

10734	D	11	3-[(2-bromothien-5-yl)methylidenyl]-5-methylaminosulfonyl-2-indolinone
10734	E	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	4	3-(5-chloro-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	6	3-(4-nitrobenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	9	3-(3-bromo-4-hydroxybenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	10	3-(4-t-butylbenzylidenyl)-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	E	11	3-[(2-bromothien-5-yl)methylidenyl]-5-[4-(trifluoromethyl)phenylaminosulfonyl]-2-indolinone
10734	F	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	4	3-(5-chloro-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	6	3-(4-nitrobenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone

197  
Table 13  
(continued)

10734	F	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	9	3-(3-bromo-4-hydroxybenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	10	3-(4-t-butylbenzylidenyl)-5-(morpholin-1-yl)sulfonyl-2-indolinone
10734	F	11	
10734	G	2	3-(3-ethoxy-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	3	3-(3,5-dichloro-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	4	3-(5-chloro-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	5	3-(4-diethylamino-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	6	3-(4-nitrobenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	7	3-(3,5-dibromo-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	8	3-(3-fluoro-2-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	9	3-(3-bromo-4-hydroxybenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	10	3-(4-t-butylbenzylidenyl)-5-(2-chloroethyl)-2-indolinone
10734	G	11	3-[(2-bromothien-5-yl)methylidenyl]-5-(2-chloroethyl)-2-indolinone

Table 14

Barcode/ Plate Row- Plate Column	Fik Kinase	Biochem EGFR	PDGF Kinase	Met Kinase
	%Inhibition	%Inhibition	%Inhibition	% Inhibition
10717/A02	0.1	24.3		46.1
10717/A03	2.9	1.0		54.6
10717/A04	-4.5	29.0		37.4
10717/A05	-2.6	16.6		35.6
10717/A06	-10.8	-7.8		31.7
10717/A07	-6.4	20.2		29.2
10717/A08	-5.2	39.1		21.7
10717/A09	-3.9	37.7		9.4
10717/A10	-3.3	8.1		71.6
10717/A11	-5.8	59.9		64.8
10717/B02	5.0	31.7		87.5
10717/B03	-8.8	7.3		90.5
10717/B04	-18.3	10.3		70.0
10717/B05	1.0	31.7		87.4
10717/B06	5.4	-30.8		89.5
10717/B07	-18.3	58.3		90.0
10717/B08	-0.9	60.5		88.8
10717/B09	-40.7	78.3		88.8
10717/B10	-2.3	16.1		56.1
10717/B11	11.4	82.7		91.0
10717/C02	4.1	-0.4		29.7
10717/C03	-7.7	18.0		25.3
10717/C04	-0.8	14.4		25.0
10717/C05	-2.3	13.1		44.6
10717/C06	7.6	-49.7		44.1
10717/C07	1.6	28.7		16.5
10717/C08	7.0	24.3		27.3
10717/C09	77.1	8.1		47.7
10717/C10	-8.0	17.5		22.8
10717/C11	4.6	67.3		71.8
10717/D02	5.1	10.1		28.6
10717/D03	1.1	-1.4		11.1
10717/D04	-2.1	4.9		21.0
10717/D05	-3.8	-2.8		23.8
10717/D06	1.0	-23.4		33.8
10717/D07	-8.4	-4.5		16.8
10717/D08	6.8	-7.8		16.0
10717/D09	-55.0	6.8		29.1
10717/D10	-6.0	3.5		15.6
10717/D11	11.6	59.1		55.3
10717/E02	17.9	17.2		24.0
10717/E03	19.0	11.7		52.2
10717/E04	6.1	-28.3		29.4
10717/E05	13.2	22.4		39.1
10717/E06	7.5	-26.1		24.8
10717/E07	15.3	-7.8		41.0
10717/E08	13.2	28.2		51.7
10717/E09	-1.1	-5.8		19.2
10717/E10	4.7	-6.1		35.9
10717/E11	8.9	44.9		75.1

199  
Table 14  
(continued)

10717/F02	2.2	6.2	30.4
10717/F03	0.5	-4.7	42.8
10717/F04	-0.1	-15.7	11.4
10717/F05	3.2	-20.1	21.5
10717/F06	8.9	-22.8	49.0
10717/F07	2.0	-14.3	37.6
10717/F08	-0.7	-23.4	64.0
10717/F09	-13.3	1.8	41.4
10717/F10	-4.4	-26.4	54.6
10717/F11	1.4	91.2	81.5
10717/G02	14.9	32.3	30.7
10717/G03	1.8	18.8	4.5
10717/G04	0.8	6.0	10.9
10717/G05	5.3	-0.1	4.7
10717/G06	4.3	-3.4	34.0
10717/G07	-17.0	13.1	7.5
10717/G08	1.9	36.4	10.9
10717/G09	-29.7	24.9	19.1
10717/G10	4.8	2.4	30.9
10717/G11	16.4	71.7	73.8
10718/A02	3.0	11.3	54.6
10718/A03	7.6	-6.1	92.7
10718/A04	6.9	27.3	81.7
10718/A05	3.2	-6.9	36.1
10718/A06	7.8	19.4	61.3
10718/A07	16.2	-10.6	58.6
10718/A08	3.2	5.8	36.8
10718/A09	-18.4	-4.1	67.7
10718/A10	23.4	41.5	77.9
10718/A11	2.7	21.2	58.9
10718/B02	7.0	24.9	52.9
10718/B03	1.7	-0.2	77.9
10718/B04	11.8	8.5	63.9
10718/B05	11.5	56.3	76.0
10718/B06	16.5	28.5	78.4
10718/B07	17.7	9.9	53.7
10718/B08	5.4	28.9	63.4
10718/B09	-14.7	-0.8	52.9
10718/B10	20.1	13.7	83.6
10718/B11	4.5	30.3	69.6
10718/C02	26.2	-21.9	29.6
10718/C03	-13.9	41.3	95.7
10718/C04	15.3	14.8	93.1
10718/C05	20.5	10.9	8.7
10718/C06	16.8	5.6	3.9
10718/C07	6.3	-4.9	29.6
10718/C08	19.6	13.1	22.7
10718/C09	5.3	26.5	38.2
10718/C10	-11.9	-18.7	4.4
10718/C11	11.4	-0.2	10.1
10718/D02	13.3	14.4	32.0
10718/D03	1.1	61.9	92.9
10718/D04	6.4	52.0	92.9
10718/D05	11.5	2.8	10.6

200  
Table 14  
(continued)

10718/D06	15.8	20.0	11.1
10718/D07	7.8	5.6	26.1
10718/D08	3.9	3.0	2.3
10718/D09	-9.1	6.0	9.9
10718/D10	15.0	12.3	55.3
10718/D11	13.3	5.4	11.3
10718/E02	19.7	1.0	46.3
10718/E03	10.0	50.4	95.3
10718/E04	15.1	16.4	87.7
10718/E05	16.1	-3.1	32.2
10718/E06	15.4	2.0	33.4
10718/E07	15.6	13.9	80.5
10718/E08	9.2	9.3	69.6
10718/E09	0.9	17.0	80.8
10718/E10	15.2	-7.5	60.8
10718/E11	12.1	-15.2	37.5
10718/F02	20.1	17.8	66.7
10718/F03	-0.2	22.5	87.9
10718/F04	9.4	1.2	78.1
10718/F05	19.5	-4.9	53.7
10718/F06	18.3	-9.1	42.5
10718/F07	16.5	-6.3	67.9
10718/F08	15.3	-8.7	28.4
10718/F09	-3.0	-9.5	52.7
10718/F10	17.9	-12.0	23.7
10718/F11	10.1	-3.9	31.3
10718/G02	-2.5	49.2	67.7
10718/G03	-4.7	57.3	77.9
10718/G04	1.8	15.8	78.1
10718/G05	3.7	2.8	60.3
10718/G06	9.8	-18.7	61.0
10718/G07	11.4	-21.3	52.0
10718/G08	6.1	-8.3	17.5
10718/G09	-12.8	-15.4	27.0
10718/G10	7.1	-7.5	10.8
10718/G11	15.6	-4.9	3.0
10719/A02	21.4	43.0	40.9
10719/A03	3.9	67.7	84.1
10719/A04	19.2	43.7	22.9
10719/A05	10.0	23.1	39.6
10719/A06	14.0	18.2	-7.0
10719/A07	21.3	15.5	68.1
10719/A08	11.9	47.3	75.5
10719/A09	12.3	2.2	47.0
10719/A10	10.9	8.2	13.4
10719/A11	7.4	10.5	34.9
10719/B02	11.5	29.0	47.0
10719/B03	14.2	59.5	85.8
10719/B04	24.9	29.9	38.4
10719/B05	17.7	35.9	33.6
10719/B06	21.3	-0.5	22.5
10719/B07	12.5	23.7	52.2
10719/B08	4.0	42.3	33.2
10719/B09	11.3	-17.7	23.5

Table 14  
(continued)

10719/B10	1.1	-1.2	53.4
10719/B11	11.2	-23.9	36.5
10719/C02	4.1	10.2	41.3
10719/C03	15.3	60.6	69.1
10719/C04	59.9	14.4	14.7
10719/C05	25.6	27.4	35.5
10719/C06	47.7	-14.3	18.4
10719/C07	31.2	14.4	7.7
10719/C08	15.0	-10.2	57.5
10719/C09	23.5	-0.1	8.9
10719/C10	11.8	10.7	7.9
10719/C11	9.9	-25.7	-5.1
10719/D02	9.7	9.8	27.5
10719/D03	4.8	95.7	93.2
10719/D04	27.8	15.3	28.9
10719/D05	16.3	18.5	71.8
10719/D06	25.8	-12.2	11.2
10719/D07	-123.5	13.7	41.5
10719/D08	8.2	-12.2	45.2
10719/D09	7.8	-3.1	13.0
10719/D10	8.3	-11.8	22.3
10719/D11	-8.7	-11.1	12.8
10719/E02	26.1	40.0	35.7
10719/E03	17.1	73.0	87.2
10719/E04	31.2	-7.4	3.1
10719/E05	21.5	21.2	39.0
10719/E06	17.1	-42.0	-4.5
10719/E07	26.7	-18.4	55.5
10719/E08	21.8	36.8	80.0
10719/E09	13.5	-33.1	36.1
10719/E10	17.6	-32.4	40.2
10719/E11	26.3	-51.8	28.5
10719/F02	28.6	14.8	28.1
10719/F03	11.2	-30.8	89.5
10719/F04	26.6	-6.0	3.3
10719/F05	20.7	35.0	63.1
10719/F06	13.5	-26.0	-22.0
10719/F07	18.7	20.1	36.7
10719/F08	15.1	90.9	75.7
10719/F09	-6.5	-17.7	19.2
10719/F10	10.4	-17.7	30.8
10719/F11	11.6	-66.3	8.7
10719/G02	27.3	-12.2	-2.4
10719/G03	-25.8	89.5	87.6
10719/G04	11.5	-4.7	-8.2
10719/G05	18.0	4.0	15.9
10719/G06	23.2	-45.7	-18.1
10719/G07	20.1	-8.1	24.0
10719/G08	3.2	65.4	39.4
10719/G09	18.1	-32.8	1.3
10719/G10	9.7	-27.6	35.5
10719/G11	6.9	-44.1	24.0
10720/A02	4.7	11.3	45.2
10720/A03	17.7	-5.3	58.2



Table 14  
(continued)

10720/A04	12.3	-1.8	62.3
10720/A05	8.0	-4.4	43.4
10720/A06	5.6	44.7	63.6
10720/A07	6.6	42.5	57.2
10720/A08	-2.2	-23.2	77.9
10720/A09	8.1	8.6	75.4
10720/A10	-5.2	-2.7	68.4
10720/A11	-0.6	-23.2	58.7
10720/B02	6.5	18.4	38.8
10720/B03	6.4	32.3	53.3
10720/B04	9.8	50.5	61.8
10720/B05	11.6	58.4	51.8
10720/B06	7.3	21.2	55.1
10720/B07	12.0	52.0	61.5
10720/B08	3.6	-12.6	27.7
10720/B09	10.1	37.6	57.4
10720/B10	-5.5	50.2	45.2
10720/B11	-20.3	22.4	42.1
10720/C02	18.0	23.5	63.6
10720/C03	15.1	0.9	50.3
10720/C04	15.3	-13.1	29.0
10720/C05	-36.1	-15.3	72.5
10720/C06	12.2	-9.7	36.7
10720/C07	20.7	-25.4	26.7
10720/C08	10.9	-1.1	65.6
10720/C09	12.1	44.7	47.5
10720/C10	-21.1	2.0	62.6
10720/C11	52.5	-21.9	30.0
10720/D02	12.1	11.1	17.8
10720/D03	17.0	0.9	61.5
10720/D04	15.6	-7.7	23.6
10720/D05	4.8	-24.1	9.8
10720/D06	10.1	-35.0	31.8
10720/D07	11.8	14.8	36.2
10720/D08	3.3	-13.3	42.1
10720/D09	5.8	2.4	62.8
10720/D10	-6.6	-10.2	51.0
10720/D11	9.8	-5.5	23.9
10720/E02	5.7	25.2	18.0
10720/E03	34.3	54.4	54.9
10720/E04	18.4	-2.7	46.7
10720/E05	-13.8	40.7	55.4
10720/E06	25.5	30.1	33.1
10720/E07	18.8	55.1	30.3
10720/E08	2.5	37.4	55.1
10720/E09	11.5	56.4	43.4
10720/E10	-4.1	49.1	23.1
10720/E11	9.3	-65.5	-10.4
10720/F02	9.1	-19.3	17.8
10720/F03	10.6	7.1	44.1
10720/F04	10.6	-11.7	43.1
10720/F05	-3.6	-14.2	39.8
10720/F06	11.9	-24.3	21.9
10720/F07	4.6	35.2	64.6

203  
Table 14  
(continued)

10720/F08	-4.1	-39.6		36.2
10720/F09	5.9	6.4		49.2
10720/F10	-2.6	6.0		42.8
10720/F11	5.0	-61.1		1.6
10720/G02	5.0	-13.1		20.1
10720/G03	2.6	10.0		42.1
10720/G04	2.4	-34.1		5.0
10720/G05	-2.9	27.0		37.0
10720/G06	-3.4	-10.4		21.6
10720/G07	5.1	-8.0		12.9
10720/G08	-17.9	-9.5		26.7
10720/G09	2.1	-19.7		49.5
10720/G10	-36.6	20.4		55.9
10720/G11	-18.0	-56.7		36.2
10721/A02	10.6	17.8		41.1
10721/A03	11.4	25.5		56.2
10721/A04	6.5	59.0		85.0
10721/A05	12.5	41.4		52.9
10721/A06	6.4	32.7		81.3
10721/A07	-4.7	35.2		29.7
10721/A08	4.8	24.0		29.9
10721/A09	10.9	28.0		23.0
10721/A10	5.2	31.1		68.9
10721/A11	4.8	24.6		23.9
10721/B02	19.5	58.6		82.6
10721/B03	19.9	38.9		70.8
10721/B04	13.8	79.3		93.1
10721/B05	45.9	76.8		70.8
10721/B06	3.4	71.5		92.4
10721/B07	11.2	47.6		47.1
10721/B08	18.5	64.0		64.5
10721/B09	9.0	38.9		28.3
10721/B10	20.9	42.9		30.4
10721/B11	-2.1	34.6		6.7
10721/C02	9.7	68.3		59.2
10721/C03	16.5	64.6		6.2
10721/C04	21.8	77.7		88.7
10721/C05	56.4	68.1		48.7
10721/C06	14.4	80.2		56.4
10721/C07	10.9	24.6		25.7
10721/C08	55.8	38.3		24.8
10721/C09	17.5	39.8		-4.7
10721/C10	21.1	17.4		44.6
10721/C11	13.9	14.1		3.7
10721/D02	15.1	21.5		22.5
10721/D03	17.8	11.6		19.5
10721/D04	15.2	5.0		35.3
10721/D05	-25.1	47.0		91.9
10721/D06	1.6	44.5		9.0
10721/D07	6.4	23.0		-6.8
10721/D08	3.9	31.7		45.3
10721/D09	17.6	15.3		-4.9
10721/D10	23.7	3.3		13.4
10721/D11	20.6	22.2		23.2

204  
Table 14  
(continued)

10721/E02	17.2	-9.5		38.8
10721/E03	10.9	25.1		12.3
10721/E04	16.0	48.5		87.3
10721/E05	10.8	61.3		69.9
10721/E06	40.4	91.5		81.0
10721/E07	15.6	37.7		43.6
10721/E08	15.7	29.8		39.5
10721/E09	36.9	42.5		0.7
10721/E10	9.3	19.9		55.7
10721/E11	0.7	32.1		31.3
10721/F02	17.0	11.0		27.8
10721/F03	9.1	7.0		40.6
10721/F04	7.4	0.0		26.0
10721/F05	8.1	20.5		67.8
10721/F06	2.2	21.7		80.3
10721/F07	4.8	3.5		55.7
10721/F08	-6.4	37.3		76.1
10721/F09	65.2	7.0		52.5
10721/F10	49.6	7.5		79.9
10721/F11	29.7	95.9		78.2
10721/G02	16.4	23.6		7.9
10721/G03	12.1	23.4		25.3
10721/G04	3.2	64.6		90.3
10721/G05	-15.1	7.7		8.6
10721/G06	18.9	23.2		39.5
10721/G07	3.3	14.7		10.0
10721/G08	5.4	12.8		-2.4
10721/G09	20.4	14.9		5.1
10721/G10	24.4	2.1		12.0
10721/G11	-7.1	0.4		-0.0
10722/A02	0.8	23.7	28.9	44.9
10722/A03	6.7	0.8	29.5	90.3
10722/A04	13.4	21.0	-0.9	51.4
10722/A05	10.5	22.4	33.5	90.5
10722/A06	9.6	28.4	19.8	71.6
10722/A07	9.4	29.9	23.8	64.1
10722/A08	13.7	23.9	15.2	70.5
10722/A09	7.3	16.8	21.5	86.5
10722/A10	6.6	-4.2	15.2	79.0
10722/A11	6.7	-0.1	21.5	68.6
10722/B02	10.1	16.3	28.9	44.3
10722/B03	13.6	19.6	3.7	40.1
10722/B04	14.7	10.6	3.1	53.4
10722/B05	18.5	9.3	21.5	67.2
10722/B06	13.9	-4.9	21.5	72.6
10722/B07	6.6	6.2	20.9	48.2
10722/B08	11.2	0.5	27.8	72.0
10722/B09	8.7	7.8	14.6	59.7
10722/B10	-0.9	-11.3	20.3	56.4
10722/B11	5.2	-15.5	25.5	83.0
10722/C02	29.1	32.1	30.6	34.5
10722/C03	16.7	42.3	22.6	73.6
10722/C04	10.7	26.7	8.9	70.7
10722/C05	23.5	19.1	26.6	44.9

Table 14  
(continued)

10722/C06	24.5	-11.0	24.9	45.1
10722/C07	15.8	-15.5	31.2	61.2
10722/C08	17.8	14.8	31.2	80.1
10722/C09	25.9	-3.1	32.4	45.1
10722/C10	2.3	22.8	18.0	33.9
10722/C11	13.8	-14.2	36.4	52.6
10722/D02	30.7	26.1	31.8	26.4
10722/D03	15.0	31.0	-9.4	52.8
10722/D04	23.5	20.3	15.7	63.4
10722/D05	21.4	-3.8	22.0	35.8
10722/D06	21.9	-2.5	8.9	32.4
10722/D07	14.1	-2.8	25.5	42.6
10722/D08	29.1	-2.6	41.5	60.5
10722/D09	14.7	-17.2	30.6	52.2
10722/D10	8.2	-0.6	41.5	40.5
10722/D11	9.6	-10.1	15.2	41.0
10722/E02	17.0	22.2	23.2	71.1
10722/E03	10.7	33.0	-7.2	88.4
10722/E04	38.6	1.4	30.6	52.6
10722/E05	19.2	-7.0	19.2	73.0
10722/E06	21.4	7.6	32.9	71.6
10722/E07	24.3	28.7	40.9	71.6
10722/E08	18.6	10.4	38.7	82.8
10722/E09	16.2	4.1	26.6	55.1
10722/E10	3.1	-13.3	31.8	86.6
10722/E11	15.3	4.2	28.3	84.0
10722/F02	5.3	9.2	12.9	33.9
10722/F03	12.0	13.7	-14.0	59.7
10722/F04	27.5	16.8	-2.0	58.9
10722/F05	15.0	-2.8	6.0	6.4
10722/F06	11.0	6.5	2.6	6.0
10722/F07	15.5	-3.7	-6.6	63.0
10722/F08	66.3	-5.4	25.5	89.3
10722/F09	15.3	-35.8	26.6	65.7
10722/F10	3.3	10.7	24.9	67.8
10722/F11	4.5	-6.5	15.7	73.2
10722/G02	15.1	27.3	14.6	43.0
10722/G03	5.3	4.1	-3.7	52.2
10722/G04	7.2	-13.3	11.7	63.2
10722/G05	10.8	-9.0	-6.0	9.7
10722/G06	7.4	-5.2	-6.0	12.2
10722/G07	8.0	-32.5	-3.7	41.2
10722/G08	8.2	-8.5	12.9	66.1
10722/G09	6.1	-5.9	0.9	51.0
10722/G10	-1.7	3.3	16.9	27.0
10722/G11	0.6	-39.4	0.3	35.3
10723/A02	-5.5	97.8	64.4	100.8
10723/A03	1.2	38.5	11.7	76.5
10723/A04	27.2	30.8	13.1	97.9
10723/A05	-17.8	26.4	17.9	75.7
10723/A06	8.6	20.1	43.6	79.1
10723/A07	-6.1	3.9	22.1	63.2
10723/A08	-12.9	-2.1	29.7	77.3
10723/A09	-1.0	-4.5	42.9	85.9

Table 14  
(continued)

10723/A10	-3.1	-24.8	34.6	62.1
10723/A11	42.9	-4.0	41.5	60.0
10723/B02	-0.3	91.0	29.0	100.3
10723/B03	7.1	-5.0	14.5	82.5
10723/B04	18.7	5.1	40.1	90.6
10723/B05	-15.4	36.4	15.2	85.1
10723/B06	31.8	11.9	58.8	90.6
10723/B07	6.5	28.8	24.9	86.7
10723/B08	1.0	-0.4	56.1	82.8
10723/B09	2.7	-12.0	27.6	57.7
10723/B10	5.8	1.8	17.2	88.5
10723/B11	6.3	-26.0	22.8	62.6
10723/C02	9.6	73.6	39.4	100.6
10723/C03	-3.1	5.9	42.9	88.8
10723/C04	8.8	23.5	36.7	91.9
10723/C05	5.6	35.2	22.8	73.1
10723/C06	17.8	-4.5	26.3	63.4
10723/C07	20.9	-4.0	27.6	44.3
10723/C08	-35.5	45.0	29.0	83.0
10723/C09	-22.3	62.7	62.3	84.6
10723/C10	9.5	-7.2	25.6	43.8
10723/C11	9.5	-1.1	8.9	47.0
10723/D02	2.0	63.2	22.1	93.0
10723/D03	-14.7	33.5	8.2	69.4
10723/D04	15.2	45.1	31.8	97.7
10723/D05	-6.1	3.7	8.2	54.5
10723/D06	17.6	-7.4	6.2	60.0
10723/D07	15.8	13.4	16.6	21.9
10723/D08	-4.5	4.9	31.1	53.5
10723/D09	50.4	-3.8	21.4	62.6
10723/D10	6.5	-9.3	21.4	38.1
10723/D11	14.8	-6.2	24.9	42.0
10723/E02	8.1	91.0	46.4	97.9
10723/E03	8.7	8.3	47.1	76.8
10723/E04	30.7	59.8	36.0	94.5
10723/E05	8.9	-15.6	-4.9	63.7
10723/E06	19.3	11.5	18.6	74.4
10723/E07	17.4	38.1	14.5	47.7
10723/E08	-0.4	52.6	26.3	89.3
10723/E09	7.9	29.1	22.1	91.7
10723/E10	5.2	-7.9	44.3	59.5
10723/E11	8.9	-44.6	32.5	50.1
10723/F02	10.3	70.4	1.3	99.0
10723/F03	4.4	9.3	1.3	78.3
10723/F04	12.3	17.5	21.4	94.0
10723/F05	-6.4	-3.8	-7.7	45.6
10723/F06	20.4	5.4	-30.6	84.1
10723/F07	20.7	-4.1	6.8	26.6
10723/F08	-0.5	5.7	20.7	75.5
10723/F09	1.2	14.1	3.4	78.6
10723/F10	9.1	4.2	-2.2	74.1
10723/F11	-1.2	-41.3	36.7	72.3
10723/G02	-1.6	90.8	13.8	99.2
10723/G03	4.3	18.5	6.2	74.7

Table 14  
(continued)

10723/G04	8.7	16.7	21.4	85.9
10723/G05	-9.4	1.3	2.0	79.9
10723/G06	14.1	-26.7	-0.8	64.5
10723/G07	14.2	15.5	-5.6	43.0
10723/G08	-22.9	0.1	7.5	79.9
10723/G09	-1.8	-32.6	-2.9	80.7
10723/G10	3.5	-4.1	-27.8	40.7
10723/G11	-4.1	-35.0	-7.7	39.4
10724/A02	1.8	36.7	6.3	61.7
10724/A03	-7.8	17.2	0.1	30.7
10724/A04	-15.9	15.4	5.0	62.6
10724/A05	-15.2	20.3	5.0	68.4
10724/A06	-3.7	1.4	30.7	46.8
10724/A07	3.7	18.3	16.1	58.7
10724/A09	-5.2	1.6	19.6	37.5
10724/A10	1.6	40.0	28.6	83.8
10724/A11	12.8	-16.6	29.3	27.2
10724/B02	-6.2	34.9	-21.5	48.8
10724/B03	-48.9	14.9	14.7	51.0
10724/B04	-20.5	50.2	42.5	81.2
10724/B05	-2.2	21.2	12.6	45.6
10724/B06	13.4	30.9	43.2	52.1
10724/B07	-1.8	44.0	27.2	57.9
10724/B09	3.5	8.7	25.8	43.8
10724/B10	8.5	76.2	9.8	95.0
10724/B11	9.0	-23.2	23.0	43.0
10724/C02	-0.3	53.6	-9.0	40.7
10724/C03	-20.3	16.5	4.3	68.7
10724/C04	-18.6	13.2	24.4	84.3
10724/C05	-18.6	-0.8	20.3	67.7
10724/C06	-1.5	-2.4	34.9	15.4
10724/C07	-1.2	9.4	22.3	14.2
10724/C09	9.3	1.0	20.3	5.3
10724/C10	-2.3	13.8	27.2	91.2
10724/C11	10.3	0.7	23.0	4.9
10724/D02	12.4	40.5	-9.6	37.5
10724/D03	0.1	2.5	-15.2	18.2
10724/D04	0.5	5.4	-1.3	70.5
10724/D05	-1.6	-8.4	35.6	36.1
10724/D06	12.4	-12.4	40.4	23.0
10724/D07	-2.6	25.6	7.0	38.1
10724/D09	0.9	-15.3	18.9	16.1
10724/D10	3.7	12.7	38.3	59.6
10724/D11	14.9	12.9	29.3	20.3
10724/E02	17.7	39.8	-54.2	55.4
10724/E03	10.6	33.1	14.7	85.8
10724/E04	55.2	8.9	-32.6	93.3
10724/E05	13.8	0.5	-7.6	70.3
10724/E06	8.3	1.6	6.3	25.8
10724/E07	-3.6	9.4	0.1	46.8
10724/E09	14.3	6.3	21.0	27.0
10724/E10	7.3	41.4	34.9	84.0
10724/E11	5.1	-26.8	5.0	39.3
10724/F02	9.7	27.4	0.8	73.0

208  
Table 14  
(continued)

10724/F03	-12.5	9.8	-45.8	44.2
10724/F04	10.2	2.9	-52.1	81.9
10724/F05	-7.2	-16.4	-0.6	67.0
10724/F06	13.8	-3.5	-5.5	51.2
10724/F07	-6.0	8.9	-6.2	47.3
10724/F09	17.1	-14.6	-17.3	20.5
10724/F10	2.7	-10.4	1.5	55.6
10724/F11	4.5	3.8	-6.9	49.3
10724/G02	15.1	42.5	-7.6	44.9
10724/G03	-8.4	7.8	-2.7	36.7
10724/G04	-7.9	12.9	-12.4	71.0
10724/G05	-0.1	-20.8	-10.3	61.0
10724/G06	0.1	3.2	-6.9	20.3
10724/G07	-1.9	-11.7	-41.6	2.3
10724/G09	9.1	-21.7	-18.0	-2.8
10724/G10	7.0	-10.6	-15.9	62.8
10724/G11	6.8	-29.5	-29.1	11.2
10725/A02	-2.0	3.9	-14.2	46.6
10725/A03	3.6	-38.2	5.9	68.0
10725/A04	-8.6	26.2	-3.2	55.3
10725/A05	-13.9	7.9	13.1	47.5
10725/A06	-7.3	-9.5	40.9	71.7
10725/A07	-12.3	18.2	17.9	59.3
10725/A08	-2.9	10.9	14.1	45.3
10725/A09	-13.9	4.9	29.4	44.3
10725/A10	-3.2	14.0	33.7	43.2
10725/A11	-21.9	14.6	18.9	49.1
10725/B02	-2.8	2.5	-7.5	66.9
10725/B03	4.9	-15.3	7.8	70.8
10725/B04	1.1	76.9	9.3	90.4
10725/B05	-61.0	20.4	44.7	68.3
10725/B06	-0.5	-13.7	31.3	53.3
10725/B07	24.6	45.8	100.8	74.0
10725/B08	-24.1	41.8	29.4	66.7
10725/B09	0.4	72.3	43.8	65.7
10725/B10	5.1	53.3	26.0	69.9
10725/B11	-42.3	43.0	66.3	76.3
10725/C02	7.0	-43.4	-5.1	6.3
10725/C03	2.0	-12.7	19.3	72.9
10725/C04	-27.3	31.8	25.1	75.9
10725/C05	-37.0	-21.9	28.9	31.7
10725/C06	-9.3	-11.5	46.6	54.7
10725/C07	65.0	-16.5	107.0	38.8
10725/C08	-8.7	-11.9	101.7	28.0
10725/C09	11.2	23.6	34.7	24.1
10725/C10	8.7	5.3	38.5	-0.6
10725/C11	104.5	-22.1	80.7	48.4
10725/D02	-3.6	-23.9	-8.4	14.0
10725/D03	-11.3	-2.5	5.4	72.9
10725/D04	3.6	4.3	12.2	55.1
10725/D05	2.3	-19.7	10.7	24.5
10725/D06	-0.5	-26.4	21.7	24.7
10725/D07	2.6	-25.8	18.4	37.0
10725/D08	1.8	20.0	38.5	39.2

209  
Table 14  
(continued)

10725/D09	-0.9	4.3	35.6	28.0
10725/D10	9.0	11.7	43.8	27.8
10725/D11	13.6	-12.5	23.2	100.5
10725/E02	-5.6	4.3	-8.9	40.2
10725/E03	-0.8	-10.3	10.7	60.9
10725/E04	-38.8	31.2	3.1	59.0
10725/E05	-0.2	-5.5	27.5	28.2
10725/E06	-1.8	-17.7	39.0	36.7
10725/E07	9.7	12.5	28.9	45.3
10725/E08	12.1	14.2	48.6	39.7
10725/E09	7.0	31.4	37.5	22.4
10725/E10	9.3	6.1	28.4	-4.7
10725/E11	18.9	-36.0	20.8	9.6
10725/F02	5.8	-3.7	-15.1	27.8
10725/F03	4.3	-36.2	-27.1	63.2
10725/F04	-6.9	-49.6	-4.6	38.1
10725/F05	-0.8	-18.9	-5.6	15.5
10725/F06	-1.0	-37.8	14.1	41.8
10725/F07	6.9	16.4	15.0	67.8
10725/F08	8.9	15.4	28.9	72.2
10725/F09	6.8	32.2	28.4	48.5
10725/F10	4.8	3.7	17.9	14.2
10725/F11	9.9	20.8	20.3	25.7
10725/G02	-3.7	-20.5	-11.8	30.8
10725/G03	-6.9	-2.5	-6.5	58.6
10725/G04	6.1	-12.3	-8.9	47.1
10725/G05	-18.3	68.7	7.4	15.6
10725/G06	21.7	-19.9	27.5	35.8
10725/G07	4.8	-25.8	23.7	39.7
10725/G08	-14.8	-13.7	8.3	47.3
10725/G09	15.2	6.5	43.8	4.7
10725/G10	11.1	17.8	44.7	27.7
10725/G11	-28.0	-32.4	22.2	25.7
10726/A03	-2.6	-12.5	4.3	70.1
10726/A04	7.6	40.8	44.2	85.7
10726/A05	-7.1	-28.4	22.1	75.2
10726/A06	-4.6	0.2	22.1	54.7
10726/A07	-72.3	88.7	-36.8	101.4
10726/A08	-4.0	-28.4	10.7	63.1
10726/A09	-4.5	-6.3	16.4	70.8
10726/A10	3.7	26.5	8.1	58.9
10726/A11	0.5	6.2	23.3	70.8
10726/B03	11.1	3.5	16.4	81.1
10726/B04	16.8	71.1	39.1	78.9
10726/B05	13.2	49.0	27.1	96.8
10726/B06	11.3	6.6	34.1	76.1
10726/B07	-36.5	72.4	-59.5	98.5
10726/B08	12.2	23.6	24.6	60.2
10726/B09	7.5	28.9	22.7	72.3
10726/B10	3.7	40.8	6.2	58.5
10726/B11	7.4	39.4	23.3	64.4
10726/C03	24.9	29.8	28.4	38.9
10726/C04	12.3	58.4	36.6	91.7
10726/C05	4.0	16.7	25.2	58.0



Table 14  
(continued)

10726/C06	23.8	-0.9	36.0	42.6
10726/C07	-17.0	40.8	-67.7	84.9
10726/C08	3.4	7.5	21.4	46.8
10726/C09	12.9	-14.3	26.5	48.5
10726/C10	5.5	2.8	16.4	36.7
10726/C11	-32.2	4.8	51.1	34.7
10726/D03	21.6	-5.4	21.4	52.1
10726/D04	7.8	-20.1	34.1	62.9
10726/D05	8.2	-8.1	39.1	51.2
10726/D06	16.3	-24.4	28.4	42.8
10726/D07	-26.9	18.5	-81.0	84.6
10726/D08	12.1	-11.4	22.1	39.5
10726/D09	14.4	-6.5	22.1	45.7
10726/D10	14.7	-6.5	32.2	35.3
10726/D11	10.5	-6.3	30.9	9.6
10726/E03	-5.5	-15.9	20.2	62.4
10726/E04	8.1	53.0	12.6	85.5
10726/E05	8.1	5.5	4.3	71.0
10726/E06	6.2	-20.6	41.7	-7.4
10726/E07	-40.0	20.5	-12.1	84.0
10726/E08	4.1	-8.5	34.1	58.9
10726/E09	9.9	10.0	34.7	50.3
10726/E10	16.5	-9.0	37.9	41.5
10726/E11	16.2	-14.1	30.3	34.5
10726/F03	8.3	-17.4	5.6	54.1
10726/F04	31.5	33.4	18.3	93.5
10726/F05	8.9	-26.8	-17.8	51.2
10726/F06	17.7	-24.1	17.0	16.2
10726/F07	9.6	76.2	-99.4	96.1
10726/F08	15.3	-21.5	28.4	67.3
10726/F09	9.6	-22.8	-2.6	66.8
10726/F10	7.0	-17.4	9.4	51.4
10726/F11	13.6	-16.8	25.2	57.6
10726/G03	11.3	-17.2	4.3	26.8
10726/G04	9.7	60.6	14.5	72.8
10726/G05	14.9	5.1	6.2	81.1
10726/G06	7.0	-37.5	-26.6	19.9
10726/G07	-13.7	54.4	-107.6	94.8
10726/G08	2.9	-2.7	14.5	39.1
10726/G09	3.6	3.3	13.2	42.4
10726/G10	10.5	6.0	-7.0	26.8
10726/G11	9.1	1.3	-7.7	11.8
10727/A02	-1.3	3.2	-10.3	52.0
10727/A03	6.3	-19.2	-4.5	40.7
10727/A04	-4.6	28.2	12.3	80.9
10727/A05	4.2	-3.0	5.7	29.0
10727/A06	-17.1	-6.3	13.7	32.7
10727/A07	-10.7	-3.7	12.3	61.1
10727/A08	-0.6	9.7	15.2	9.7
10727/A09	-16.8	12.7	16.6	44.2
10727/A10	-6.4	89.0	18.1	95.2
10727/A11	7.4	6.2	10.8	16.5
10727/B02	2.4	-18.4	-10.3	90.5
10727/B03	-13.4	-2.8	-7.4	84.5

211  
Table 14  
(continued)

10727/B04	46.0	47.4	21.0	87.1
10727/B05	10.5	39.0	9.4	83.3
10727/B06	-3.9	40.7	6.4	91.0
10727/B07	8.4	46.5	0.6	83.5
10727/B08	4.0	47.4	14.4	90.7
10727/B09	6.7	31.7	18.1	81.9
10727/B10	3.9	94.0	29.7	99.2
10727/B11	16.8	6.9	15.9	69.8
10727/C02	-2.0	-28.5	-12.5	73.8
10727/C03	-3.2	14.6	11.5	11.9
10727/C04	0.2	27.6	23.2	81.7
10727/C05	13.7	11.8	7.9	8.9
10727/C06	5.2	5.6	12.3	45.2
10727/C07	15.9	8.4	13.0	36.7
10727/C08	4.9	3.6	23.2	47.8
10727/C09	-13.5	16.6	21.7	37.9
10727/C10	-35.3	85.3	45.7	94.4
10727/C11	-25.6	-15.6	22.4	14.5
10727/D02	3.2	22.6	5.7	51.6
10727/D03	3.1	39.4	-3.0	24.0
10727/D04	25.9	39.6	6.4	76.0
10727/D05	8.5	3.4	-0.1	39.9
10727/D06	13.1	8.6	10.8	24.4
10727/D07	19.7	10.5	-14.7	50.6
10727/D08	14.1	-0.5	5.0	8.5
10727/D09	8.2	15.1	7.2	17.9
10727/D10	11.4	86.2	9.4	79.9
10727/D11	10.5	-23.7	17.4	17.3
10727/E02	9.3	22.4	-6.7	28.0
10727/E03	11.1	35.5	5.7	28.8
10727/E04	46.1	82.1	-7.4	98.4
10727/E05	17.1	12.9	-7.4	12.1
10727/E06	14.2	-9.3	9.4	-2.2
10727/E07	20.1	7.1	10.1	45.2
10727/E08	14.2	25.6	23.9	27.0
10727/E09	9.3	15.1	15.9	28.4
10727/E10	9.7	85.1	5.0	96.6
10727/E11	37.3	-33.4	7.9	-5.4
10727/F02	15.9	-0.5	11.5	52.0
10727/F03	8.9	36.8	-3.7	22.0
10727/F04	15.3	17.9	-10.3	92.0
10727/F05	21.8	-9.1	-3.7	6.0
10727/F06	14.5	4.9	8.6	37.7
10727/F07	21.4	-8.9	2.1	17.9
10727/F08	12.5	-5.4	10.1	36.9
10727/F09	-45.2	-2.0	21.7	9.3
10727/F10	15.9	74.1	9.4	93.4
10727/F11	17.3	-2.6	18.1	-3.0
10727/G02	7.1	37.5	-20.5	81.5
10727/G03	-3.5	19.4	-10.3	40.5
10727/G04	27.2	80.6	-27.0	94.0
10727/G05	8.0	11.2	-2.3	7.1
10727/G06	2.9	-12.1	-12.5	31.1
10727/G07	7.2	5.4	-24.1	29.6

212  
Table 14  
(continued)

10727/G08	15.7	-19.6	-7.4	21.8
10727/G09	5.7	-9.7	10.8	18.8
10727/G10	-5.6	85.1	10.8	99.2
10727/G11	6.9	-3.5	15.9	-0.8
10728/A02	-12.3	9.2	-7.9	25.6
10728/A03	-7.3	-25.8	-7.9	29.2
10728/A04	-3.5	28.0	15.6	28.5
10728/A05	-10.8	17.7	4.5	31.8
10728/A06	-10.4	17.2	-3.1	19.7
10728/A07	-21.6	59.6	31.1	28.5
10728/A08	-1.4	24.1	0.5	40.2
10728/A09	-5.5	19.3	10.3	53.1
10728/A10	-16.3	-3.4	1.8	77.2
10728/A11	-2.3	-0.6	-9.3	58.8
10728/B02	-11.1	-10.5	-0.4	61.2
10728/B03	-1.3	-36.6	10.3	74.4
10728/B04	-6.0	-2.0	9.8	67.2
10728/B05	-12.3	26.9	9.4	60.4
10728/B06	4.7	38.1	7.6	56.0
10728/B07	31.4	11.1	20.9	82.2
10728/B08	14.8	34.7	-6.6	77.0
10728/B09	1.7	31.7	-0.4	81.7
10728/B10	3.9	16.8	2.7	79.3
10728/B11	-1.0	48.2	-12.4	80.3
10728/C02	-32.1	-35.4	42.3	15.5
10728/C03	10.5	9.7	24.9	16.9
10728/C04	-0.0	16.1	27.2	33.6
10728/C05	-21.7	16.1	23.2	33.7
10728/C06	8.4	4.2	2.7	22.9
10728/C07	-7.2	8.3	8.9	46.3
10728/C08	-2.2	17.5	9.4	25.5
10728/C09	14.5	-6.8	8.1	31.6
10728/C10	6.1	4.4	11.2	28.7
10728/C11	-10.1	21.8	8.5	45.2
10728/D02	-0.3	9.9	9.8	21.4
10728/D03	10.2	10.8	32.0	13.5
10728/D04	6.8	-1.1	26.7	23.1
10728/D05	4.9	12.7	7.2	29.5
10728/D06	10.4	5.8	5.8	23.2
10728/D07	8.1	2.4	2.3	21.8
10728/D08	13.5	6.9	2.7	34.7
10728/D09	10.5	-2.9	-3.9	27.6
10728/D10	17.9	18.6	-3.9	30.5
10728/D11	15.9	22.1	-10.2	52.5
10728/E02	5.4	7.4	15.2	5.4
10728/E03	13.2	9.5	12.0	11.9
10728/E04	5.5	10.1	23.2	25.6
10728/E05	17.4	7.4	5.8	53.4
10728/E06	6.6	-4.7	12.0	26.4
10728/E07	9.6	21.8	28.0	79.8
10728/E08	15.2	5.1	29.4	46.3
10728/E09	9.0	0.1	22.3	40.0
10728/E10	24.7	-20.8	13.8	57.2
10728/E11	16.3	-5.9	8.9	53.1

213  
Table 14  
(continued)

10728/F02	2.9	4.4	7.2	25.6
10728/F03	6.8	-0.2	-9.3	18.7
10728/F04	14.2	5.1	7.2	47.9
10728/F05	6.0	-5.9	-0.4	53.3
10728/F06	14.4	-1.5	1.8	28.2
10728/F07	2.4	-2.2	-0.8	62.6
10728/F08	14.5	-13.5	8.9	62.8
10728/F09	5.9	-13.0	1.4	23.4
10728/F10	18.0	-6.3	4.9	48.7
10728/F11	16.7	0.8	-12.4	72.5
10728/G02	2.3	-10.2	0.9	7.1
10728/G03	14.3	-2.0	-8.4	8.8
10728/G04	21.8	-8.2	0.5	20.9
10728/G05	9.4	7.2	-4.4	63.1
10728/G06	13.5	-14.1	-13.3	25.3
10728/G07	22.6	-12.3	-17.3	42.4
10728/G08	21.4	-5.7	-11.9	42.3
10728/G09	6.8	-8.0	6.3	22.2
10728/G10	10.4	-12.5	-0.8	27.9
10728/G11	3.2	16.1	-12.8	71.4
10729/A02	15.5	10.0	-25.7	28.1
10729/A03	4.7	27.0	1.9	27.5
10729/A04	-4.0	58.8	-16.6	45.4
10729/A05	-17.7	23.4	-6.8	38.8
10729/A06	-10.9	36.5	-8.6	29.8
10729/A07	-10.0	49.0	-36.7	51.1
10729/A08	-13.3	37.8	-23.4	48.1
10729/A09	0.4	25.7	11.0	80.3
10729/A10	0.7	28.7	-12.8	34.8
10729/A11	4.9	15.5	-11.7	49.9
10729/B02	13.8	34.9	-10.2	77.2
10729/B03	11.2	38.2	-9.4	57.3
10729/B04	0.1	63.7	-22.7	43.8
10729/B05	-5.2	50.6	-25.7	51.0
10729/B06	2.0	56.9	-19.2	61.1
10729/B07	-13.4	69.0	-33.2	58.2
10729/B08	-14.7	53.2	-13.6	66.0
10729/B09	-16.0	51.6	-6.4	47.2
10729/B10	-0.7	68.3	-13.9	32.6
10729/B11	7.8	18.8	4.2	36.6
10729/C02	6.0	16.9	9.1	18.2
10729/C03	11.0	25.7	13.7	13.5
10729/C04	-2.5	35.9	4.2	20.7
10729/C05	5.8	21.8	-5.6	15.5
10729/C06	3.8	38.2	3.1	15.2
10729/C07	-22.4	60.8	-1.8	58.4
10729/C08	-20.3	25.4	-13.6	55.7
10729/C09	-26.4	33.2	-34.8	60.4
10729/C10	2.5	45.7	3.5	15.8
10729/C11	10.4	35.9	-17.4	41.3
10729/D02	12.2	5.7	15.6	31.7
10729/D03	15.3	15.5	14.1	22.6
10729/D04	-5.7	18.8	-12.8	33.1
10729/D05	2.2	22.1	2.3	28.1

214  
Table 14  
(continued)

10729/D06	0.2	45.7	2.7	30.2
10729/D07	-15.3	21.4	-20.0	25.5
10729/D08	-26.2	10.3	-21.1	27.6
10729/D09	-9.6	22.1	-12.1	34.8
10729/D10	4.1	11.3	-11.3	36.1
10729/D11	-2.0	19.2	0.1	18.8
10729/E02	26.6	8.0	28.4	11.7
10729/E03	6.9	20.1	29.2	27.5
10729/E04	9.7	19.5	26.5	9.8
10729/E05	46.8	12.6	29.9	13.4
10729/E06	12.1	43.7	24.7	-0.7
10729/E07	4.1	26.7	29.6	21.6
10729/E08	10.9	40.1	11.0	73.7
10729/E09	6.9	29.6	-11.7	85.0
10729/E10	5.7	50.3	11.8	7.5
10729/E11	70.9	25.7	22.4	50.8
10729/F02	18.9	-14.0	20.1	19.5
10729/F03	30.0	10.6	33.7	27.8
10729/F04	16.0	13.3	25.4	44.9
10729/F05	15.4	-4.8	31.5	33.8
10729/F06	36.4	15.9	29.6	44.3
10729/F07	-5.8	6.7	6.1	37.3
10729/F08	-3.4	10.3	0.8	44.6
10729/F09	-2.6	13.3	8.8	38.2
10729/F10	20.0	58.5	15.2	39.0
10729/F11	-1.5	25.4	7.2	15.2
10729/G02	18.8	-4.8	16.7	31.3
10729/G03	10.4	14.6	13.7	20.1
10729/G04	12.2	52.9	1.6	18.2
10729/G05	8.7	4.4	9.9	22.6
10729/G06	10.9	15.2	11.8	26.0
10729/G07	-2.5	-0.8	14.4	38.2
10729/G08	-1.0	6.0	0.8	39.9
10729/G09	-3.3	20.8	1.9	49.6
10729/G10	-9.1	60.1	-13.2	26.7
10729/G11	-0.5	23.4	3.8	15.4
10730/A02	-3.7	27.5	-23.1	39.5
10730/A03	-3.2	34.4	-11.2	62.3
10730/A04	-9.9	37.2	-5.1	70.6
10730/A05	-10.8	18.6	2.8	42.7
10730/A06	-7.0	6.7	6.3	61.0
10730/A07	-18.9	10.4	-23.9	55.4
10730/A08	-2.9	10.4	-6.0	69.0
10730/A09	1.9	1.1	-4.7	69.5
10730/A10	0.5	56.1	1.0	68.7
10730/A11	6.8	56.4	-6.4	91.0
10730/B02	5.0	10.4	5.4	66.3
10730/B03	-0.5	46.8	17.3	78.3
10730/B04	12.8	36.5	7.2	73.2
10730/B05	-0.5	8.5	-2.9	71.1
10730/B06	2.4	25.0	7.6	71.3
10730/B07	0.6	57.1	2.4	63.1
10730/B08	4.4	48.4	0.2	91.8
10730/B09	9.4	14.2	15.1	70.6

Table 14  
(continued)

10730/B10	15.2	15.8	19.0	69.5
10730/B11	1.9	70.2	-13.9	81.7
10730/C02	48.8	2.7	26.5	31.2
10730/C03	25.5	-12.1	36.5	43.2
10730/C04	46.1	0.1	15.5	43.2
10730/C05	11.4	-9.8	8.5	46.1
10730/C06	5.3	8.5	7.6	34.7
10730/C07	7.3	20.3	1.0	37.4
10730/C08	-2.3	24.3	8.5	56.5
10730/C09	14.0	28.2	18.1	42.9
10730/C10	15.4	20.5	44.4	40.3
10730/C11	-8.0	38.4	16.4	66.6
10730/D02	12.4	18.6	24.3	34.7
10730/D03	8.4	9.9	19.0	34.2
10730/D04	9.1	10.4	20.8	33.6
10730/D05	11.9	12.6	-1.6	38.1
10730/D06	5.8	35.3	-2.0	55.9
10730/D07	8.8	43.0	5.0	52.5
10730/D08	8.6	44.9	12.9	-13.6
10730/D09	9.8	45.1	-1.6	59.1
10730/D10	-15.3	16.7	-3.3	18.5
10730/D11	7.7	2.0	-0.7	9.7
10730/E02	24.8	17.7	16.4	18.8
10730/E03	34.5	65.3	14.6	53.3
10730/E04	22.1	13.5	18.6	35.2
10730/E05	8.7	15.8	28.7	49.0
10730/E06	11.1	1.5	26.0	52.8
10730/E07	12.0	18.8	30.0	37.1
10730/E08	25.1	6.2	48.4	40.3
10730/E09	21.8	21.7	20.3	33.9
10730/E10	26.0	9.3	39.6	63.6
10730/E11	29.1	19.1	31.7	77.2
10730/F02	18.4	2.9	20.3	-6.2
10730/F03	11.7	10.4	1.5	-0.6
10730/F04	18.3	-4.8	28.7	36.0
10730/F05	19.6	-16.3	19.5	23.5
10730/F06	21.9	-0.6	3.2	56.5
10730/F07	67.5	27.3	-2.0	60.7
10730/F08	2.1	0.8	-0.3	46.4
10730/F09	14.4	17.9	13.3	71.1
10730/F10	13.4	6.2	1.9	42.1
10730/F11	-1.3	-24.1	4.5	53.6
10730/G02	23.3	20.8	18.1	41.1
10730/G03	15.2	-6.9	44.0	43.2
10730/G04	7.4	-6.7	21.6	47.7
10730/G05	22.3	-18.2	65.0	35.8
10730/G06	8.2	-2.7	0.2	17.7
10730/G07	8.3	6.4	19.9	26.2
10730/G08	23.3	9.5	20.3	16.6
10730/G09	18.7	-20.3	23.0	16.4
10730/G10	11.3	3.1	22.1	42.1
10730/G11	-1.4	26.2	-0.3	46.1
10731/A02	2.7	14.8	-3.9	23.9
10731/A03	2.5	10.8	7.5	54.8

Table 14  
(continued)

10731/A04	5.0	20.2	5.1	43.6
10731/A05	-6.5	34.3	14.1	85.8
10731/A06	-5.5	30.1	1.3	53.0
10731/A07	-4.3	39.4	4.6	49.5
10731/A08	-13.8	25.7	-2.5	59.9
10731/A09	-2.7	21.9	-14.4	46.7
10731/A10	-5.3	26.3	-3.5	41.2
10731/A11	3.1	16.1	-0.1	53.4
10731/B02	6.5	15.5	13.2	71.6
10731/B03	1.9	12.3	9.9	60.9
10731/B04	12.0	31.3	0.3	71.0
10731/B05	3.8	35.9	17.9	86.0
10731/B06	6.2	37.5	5.6	56.2
10731/B07	11.7	29.1	6.0	41.6
10731/B08	6.2	37.2	-23.4	57.4
10731/B09	-0.5	15.0	0.3	29.6
10731/B10	1.3	50.5	4.6	72.9
10731/B11	6.9	55.2	-13.0	58.2
10731/C02	3.1	-6.9	-2.5	11.1
10731/C03	4.5	9.1	11.3	38.7
10731/C04	10.5	31.0	15.1	32.5
10731/C05	14.9	35.5	22.7	78.3
10731/C06	13.8	23.1	7.0	18.2
10731/C07	70.4	35.5	31.3	-11.6
10731/C08	10.2	23.6	-3.0	25.8
10731/C09	15.1	16.8	-6.3	22.7
10731/C10	19.7	20.9	6.5	23.3
10731/C11	5.5	29.6	-9.2	16.2
10731/D02	-8.4	4.9	17.9	8.7
10731/D03	17.3	16.3	28.4	40.2
10731/D04	9.3	15.8	6.5	24.5
10731/D05	32.7	53.9	46.0	92.7
10731/D06	16.1	23.2	8.0	59.7
10731/D07	12.3	25.9	2.7	45.9
10731/D08	25.8	16.8	-8.7	44.2
10731/D09	6.1	12.6	-2.0	23.9
10731/D10	13.0	15.8	9.9	21.1
10731/D11	15.2	43.6	8.4	56.6
10731/E02	11.2	7.9	13.7	49.1
10731/E03	-1.4	10.4	15.6	20.7
10731/E04	23.8	13.6	30.8	55.6
10731/E05	7.0	17.7	27.0	82.2
10731/E06	2.6	10.4	-12.0	37.7
10731/E07	12.6	38.4	3.7	45.9
10731/E08	10.5	40.1	8.9	59.0
10731/E09	52.5	17.2	23.2	27.0
10731/E10	33.1	25.1	21.7	35.5
10731/E11	17.9	26.4	27.9	60.7
10731/F02	11.1	17.7	14.1	47.5
10731/F03	7.9	8.4	11.8	40.6
10731/F04	24.5	5.0	3.2	17.0
10731/F05	17.6	19.5	20.3	84.4
10731/F06	2.2	7.2	-23.4	20.9
10731/F07	13.3	37.7	1.3	34.7

Table 14  
(continued)

10731/F08	9.2	7.1	4.1	23.5
10731/F09	2.3	-0.7	15.6	20.5
10731/F10	11.0	7.9	28.4	48.1
10731/F11	19.7	42.3	20.3	60.1
10731/G02	16.8	4.7	-10.1	15.2
10731/G03	12.9	7.7	6.5	33.7
10731/G04	14.5	7.1	0.3	23.3
10731/G05	17.5	18.5	8.0	72.4
10731/G06	10.8	2.3	-0.6	33.3
10731/G07	31.6	0.7	40.8	10.9
10731/G08	18.2	13.3	-13.9	19.5
10731/G09	13.3	8.9	-8.7	4.4
10731/G10	-9.0	5.5	5.6	10.3
10731/G11	1.5	67.2	16.0	64.3
10732/A02	-12.5	5.1	10.8	53.7
10732/A03	-9.9	0.8	-3.8	37.4
10732/A04	-14.1	-10.6	-9.4	34.8
10732/A05	-3.9	4.6	-12.9	20.5
10732/A06	-0.0	-1.4	12.3	5.7
10732/A07	-19.8	-0.3	0.7	26.1
10732/A08	-10.0	12.1	31.0	32.7
10732/A09	-11.2	39.7	8.8	60.3
10732/A10	10.2	6.1	7.3	20.3
10732/A11	-0.6	1.8	40.1	65.3
10732/B02	2.9	-26.0	23.5	78.0
10732/B03	8.2	-15.3	17.4	58.1
10732/B04	-1.3	-22.1	16.9	79.5
10732/B05	2.8	17.0	21.9	71.2
10732/B06	8.1	12.8	-12.4	74.3
10732/B07	1.6	15.8	21.4	75.1
10732/B08	8.0	7.8	16.9	64.4
10732/B09	14.0	2.0	18.4	69.2
10732/B10	12.1	0.6	0.7	51.5
10732/B11	9.0	9.3	70.9	73.7
10732/C02	11.9	-6.5	7.3	40.1
10732/C03	14.7	1.4	7.3	14.0
10732/C04	12.8	-14.7	3.8	30.6
10732/C05	11.2	-22.8	-17.0	18.5
10732/C06	11.8	-43.2	5.3	21.6
10732/C07	15.4	-28.6	4.3	26.5
10732/C08	7.6	1.6	17.9	54.5
10732/C09	8.0	-3.9	15.4	37.9
10732/C10	15.1	1.2	5.8	43.0
10732/C11	18.2	-5.0	16.4	31.9
10732/D02	9.2	8.7	-24.0	50.2
10732/D03	22.5	-18.7	26.0	24.9
10732/D04	24.6	-11.4	50.7	40.7
10732/D05	15.7	-36.7	4.3	30.2
10732/D06	16.3	3.6	16.4	24.3
10732/D07	14.7	-19.1	-3.8	43.2
10732/D08	33.3	-20.6	30.5	49.4
10732/D09	15.2	-9.9	15.9	40.3
10732/D10	25.5	-16.6	24.5	33.1
10732/D11	18.8	-13.4	18.9	48.6



Table 14  
(continued)

10732/E02	13.1	0.8	4.8	33.3
10732/E03	16.7	-1.6	48.7	3.9
10732/E04	15.8	-10.6	29.5	8.2
10732/E05	18.7	-17.0	41.1	2.2
10732/E06	2.8	-11.0	16.9	-2.1
10732/E07	21.3	-8.5	42.2	15.2
10732/E08	13.6	-21.7	32.6	29.4
10732/E09	15.3	-7.2	46.7	18.1
10732/E10	16.7	-3.3	35.6	1.6
10732/E11	16.2	-32.2	47.7	41.4
10732/F02	7.0	23.1	-9.4	55.6
10732/F03	31.9	54.1	51.8	68.6
10732/F04	16.2	-0.1	23.5	57.2
10732/F05	37.3	-30.7	12.8	58.9
10732/F06	11.6	-8.0	0.2	45.7
10732/F07	31.0	-12.5	38.6	65.5
10732/F08	12.6	-11.9	14.9	76.6
10732/F09	25.6	-13.4	25.5	79.7
10732/F10	14.1	0.8	15.9	65.1
10732/F11	21.9	-21.5	77.5	75.2
10732/G02	8.1	-0.7	10.3	39.5
10732/G03	0.8	-20.0	36.1	38.1
10732/G04	12.6	8.0	25.0	24.9
10732/G05	17.2	3.8	15.4	15.2
10732/G06	26.5	-12.1	0.2	16.2
10732/G07	4.6	-21.9	21.4	23.9
10732/G08	10.0	-20.4	37.6	44.7
10732/G09	16.9	-34.8	9.8	33.9
10732/G10	14.0	-38.2	20.4	45.7
10732/G11	10.9	-33.7	38.6	63.0
10733/A02	-5.2	25.9	11.5	74.6
10733/A03	45.0	33.6	23.2	24.9
10733/A04	-11.2	32.8	-14.1	24.0
10733/A05	-23.3	55.2	-4.0	18.2
10733/A06	-16.6	45.1	-24.3	33.7
10733/A07	-27.4	28.5	-12.9	27.2
10733/A08	-17.1	19.5	-10.1	27.2
10733/A09	-11.9	25.9	-7.6	22.1
10733/A10	-9.3	14.2	-13.3	21.1
10733/A11	15.0	23.0	4.2	43.5
10733/B02	-7.4	31.6	14.7	74.6
10733/B03	3.1	14.4	35.8	62.2
10733/B04	-3.3	28.5	24.9	56.3
10733/B05	-1.1	26.7	27.3	61.3
10733/B06	4.6	43.6	-9.2	71.4
10733/B07	1.2	32.7	4.2	73.5
10733/B08	-16.0	32.5	-15.7	65.5
10733/B09	-2.6	21.1	7.0	64.5
10733/B10	5.7	11.8	-59.6	65.1
10733/B11	22.5	12.5	23.7	36.6
10733/C02	5.8	31.6	15.1	71.8
10733/C03	17.0	14.4	28.1	29.3
10733/C04	8.4	29.0	19.2	18.4
10733/C05	11.5	17.2	11.1	23.2

Table 14  
(continued)

10733/C06	4.7	22.7	20.0	4.1
10733/C07	1.2	16.7	4.6	10.2
10733/C08	-28.5	65.8	-3.6	85.7
10733/C09	-18.0	46.0	91.9	16.3
10733/C10	-7.6	36.0	-6.4	20.5
10733/C11	42.8	15.8	62.2	35.1
10733/D02	3.1	12.5	17.6	63.4
10733/D03	33.2	11.2	40.7	32.8
10733/D04	15.5	19.9	26.5	37.7
10733/D05	16.5	10.6	16.8	25.1
10733/D06	17.9	30.8	1.3	-19.4
10733/D07	-1.4	37.4	0.9	-6.8
10733/D08	-8.3	38.3	42.3	80.0
10733/D09	9.8	48.3	33.8	38.7
10733/D10	2.9	46.8	-10.1	22.8
10733/D11	1.0	33.7	-4.0	31.6
10733/E02	0.8	-1.3	20.8	60.5
10733/E03	42.6	10.7	43.1	26.8
10733/E04	2.1	45.4	-13.7	17.5
10733/E05	10.6	58.3	-33.2	2.9
10733/E06	13.5	37.3	22.4	10.4
10733/E07	13.2	19.9	29.3	-10.1
10733/E08	-5.1	54.2	75.2	81.1
10733/E09	13.4	72.4	35.8	62.6
10733/E10	5.5	31.3	10.3	52.8
10733/E11	5.5	31.6	15.9	71.8
10733/F02	-15.7	11.3	3.8	71.6
10733/F03	17.5	-3.6	24.5	24.2
10733/F04	21.4	76.3	-28.7	65.1
10733/F05	26.2	84.6	-25.1	65.1
10733/F06	19.3	17.8	-4.8	20.9
10733/F07	16.4	19.2	1.7	-16.4
10733/F08	-13.2	17.2	-32.4	66.6
10733/F09	-2.1	30.1	-0.3	52.8
10733/F10	8.5	21.9	-5.6	24.4
10733/F11	4.1	0.6	-17.8	44.4
10733/G02	8.3	-6.2	-7.6	64.5
10733/G03	24.7	0.7	12.7	30.5
10733/G04	11.5	10.6	11.9	20.3
10733/G05	19.2	1.5	-1.1	1.8
10733/G06	37.0	5.2	0.1	0.8
10733/G07	19.5	18.1	-6.8	8.5
10733/G08	2.5	44.2	68.7	79.0
10733/G09	77.8	38.7	-17.0	41.4
10733/G10	12.7	18.2	-58.0	41.9
10733/G11	3.3	-1.0	-4.4	32.6
10734/A02	4.1	0.0	-3.8	51.1
10734/A03	10.1	18.5	22.3	87.8
10734/A04	0.6	11.4	11.7	68.0
10734/A05	9.1	22.6	2.9	69.9
10734/A06	-6.4	-6.4	-9.9	46.9
10734/A07	-9.4	15.2	21.9	89.3
10734/A08	0.1	6.8	9.1	71.5
10734/A09	-7.9	27.3	-9.5	88.4

Table 14  
(continued)

10734/A10	4.4	27.8	26.3	55.4
10734/A11	6.3	12.5	5.5	51.9
10734/B02	8.5	-8.9	-2.9	61.9
10734/B03	21.7	45.1	13.0	90.1
10734/B04	2.8	38.7	14.4	88.4
10734/B05	-2.3	17.8	56.3	67.8
10734/B06	-0.9	54.0	0.2	91.2
10734/B07	9.1	65.5	18.8	93.2
10734/B08	-0.5	19.3	-2.4	56.1
10734/B09	-32.3	34.9	12.6	94.3
10734/B10	15.7	60.7	7.7	82.6
10734/B11	12.6	50.9	-5.5	83.6
10734/C02	-3.9	-6.7	36.0	78.6
10734/C03	-5.6	48.6	24.5	88.2
10734/C04	-37.6	38.1	24.5	90.7
10734/C05	-10.3	9.3	3.8	52.7
10734/C06	-1.7	18.4	-0.2	48.3
10734/C07	-2.7	41.0	32.0	96.8
10734/C08	-34.2	35.1	5.5	93.2
10734/C09	-13.3	36.2	11.3	88.6
10734/C10	10.1	24.4	17.4	11.6
10734/C11	6.3	18.0	9.1	23.9
10734/D02	-11.5	5.2	6.4	46.0
10734/D03	17.4	19.6	24.1	78.6
10734/D04	6.1	-10.7	13.5	46.9
10734/D05	2.4	-9.6	8.2	55.0
10734/D06	0.0	1.3	-9.1	30.6
10734/D07	14.7	51.1	28.1	92.0
10734/D08	2.5	-13.7	2.0	49.8
10734/D09	-11.6	21.0	42.2	88.0
10734/D10	11.1	-4.4	9.9	20.6
10734/D11	9.8	14.6	17.0	33.9
10734/E02	7.9	-10.8	50.1	66.9
10734/E03	26.9	55.0	27.2	99.3
10734/E04	10.7	-7.8	26.7	88.9
10734/E05	10.6	7.9	17.9	63.6
10734/E06	28.4	6.3	13.5	50.6
10734/E07	27.9	82.4	8.2	100.8
10734/E08	26.6	24.2	13.0	89.1
10734/E09	8.0	73.0	1.1	96.2
10734/E10	18.5	-5.0	29.8	27.9
10734/E11	19.2	-8.0	16.1	67.1
10734/F02	6.2	0.7	10.4	55.0
10734/F03	4.2	24.8	-24.1	86.8
10734/F04	-2.6	3.9	25.0	76.5
10734/F05	9.8	-15.6	-1.1	73.8
10734/F06	11.0	-17.1	-21.4	64.2
10734/F07	6.6	33.7	-5.1	95.7
10734/F08	4.8	-23.6	-6.0	66.3
10734/F09	-3.7	3.1	-17.4	93.9
10734/F10	14.8	-8.3	25.8	44.8
10734/F11	13.3	-15.6	16.1	47.3
10734/G02	1.5	3.4	14.8	63.6
10734/G03	18.7	82.8	-3.8	93.4

Table 14  
(continued)

10734/G04	-1.1	62.9	16.1	72.1
10734/G05	7.4	-0.3	2.9	57.7
10734/G06	16.5	12.5	-18.8	43.1
10734/G07	21.9	51.1	-25.0	96.6
10734/G08	11.6	33.7	0.2	82.2
10734/G09	8.5	21.4	-7.7	84.7
10734/G10	10.8	3.8	9.9	19.3
10734/G11	8.7	4.1	-25.4	20.2

Claims:

1. A combinatorial library of indolinone compounds, comprising at least ten indolinones that can be formed by reacting oxindoles with aldehydes.
- 5 2. The combinatorial library of claim 1 wherein said oxindoles are type A oxindoles.
3. The combinatorial library of claim 1 wherein  
10 said aldehydes are type B aldehydes.
4. A method of making an indolinone comprising the steps of
  - (a) creating a combinatorial library of indolinones  
15 by reacting a series of oxindoles with a series of aldehydes,
  - (b) testing said indolinones in biological assays,
  - (c) selecting one or more indolinones with favorable activity; and
  - 20 (d) synthesizing one or more of said indolinones selected in step (c).
5. A 3-[(indole-3-yl)methylene]-2-indolinone compound having a substituent at the 1' position of the  
25 indole, where the substituent at the 1' position is selected from the group consisting of,
  - (a) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten  
30 membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, aldehyde, or trihalomethyl substituents;
  - (b) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is

221

optionally substituted with one or more halogen or trihalomethyl substituents;

(c) an aldehyde or ketone of formula  $\text{-CO-R}_{12}$ , where  $\text{R}_{12}$  is selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

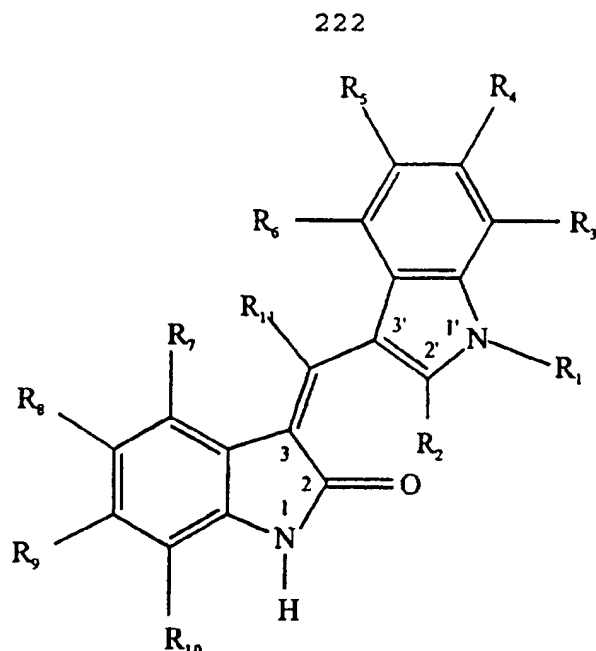
(d) a carboxylic acid of formula  $\text{-(R}_{13})_n\text{-COOH}$  or ester of formula  $\text{-(R}_{14})_m\text{-COO-R}_{15}$ , where  $\text{R}_{13}$ ,  $\text{R}_{14}$ , and  $\text{R}_{15}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(e) a sulfone of formula  $\text{-(SO}_2\text{)-R}_{16}$ , where  $\text{R}_{16}$  is selected from the group consisting of alkyl and a five or six membered heterocyclic ring, where the ring is optionally substituted with an alkyl moiety;

(f)  $\text{-(R}^{17})_n\text{-(indole-1-yl)}$  or  $\text{-(R}^{18})_m\text{-CHOH-(R}^{19})_p\text{-(indole-1-yl)}$ , where the indol moiety is optionally substituted with an aldehyde and  $\text{R}_{17}$ ,  $\text{R}_{18}$ , and  $\text{R}_{19}$  are alkyl and  $m$ ,  $n$ , and  $p$  are independently 0 or 1; and

(g) taken together with a 2' substituent of the indole ring forms a tricyclic moiety, where each ring in the tricyclic moiety is a five or six membered heterocyclic ring.

6. The compound, salt, isomer, metabolite, ester, amide, or prodrug of claim 5, wherein said compound has the formula,



where (a)  $R_1$  is selected from the group consisting of,

- (i) alkyl that is optionally substituted with  
 5 a monocyclic or bicyclic five, six, eight, nine, or ten  
 membered heterocyclic ring, where the ring is optionally  
 substituted with one or more halogen, aldehyde, or  
 trihalomethyl substituents;
- (ii) five, six, eight, nine, or ten membered  
 10 monocyclic or bicyclic heterocyclic ring, where the ring  
 is optionally substituted with one or more halogen or  
 trihalomethyl substituents;
- (iii) an aldehyde or ketone of formula  $-CO-R_{12}$ ,  
 where  $R_{11}$  is selected from the group consisting of hydro-  
 15 gen, alkyl, or a five or six membered heterocyclic ring;
- (iv) a carboxylic acid of formula  $-(R_{13})_n-COOH$   
 or ester of formula  $-(R_{14})_m-COO-R_{15}$ , where  $R_{13}$ ,  $R_{14}$ , and  $R_{15}$

and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and n and m are independently 0 or 1;

(v) a sulfone of formula  $-(SO_2)-R_{16}$ , where  $R_{16}$  is selected from the group consisting of alkyl or a five or six membered heterocyclic ring, where the ring is optionally substituted with an alkyl moiety;

(vi)  $-(R_{17})_n-(\text{indole-1-yl})$  or  $-(R_{18})_m-CHOH-(R_{19})_p-(\text{indole-1-yl})$ , where the indol moiety is optionally substituted with an aldehyde and  $R_{17}$ ,  $R_{18}$ , and  $R_{19}$  are alkyl and n, m, and p are independently 0 or 1;

(vii) taken together with a 2' substituent of the indole ring forms a tricyclic moiety, where each ring in the tricyclic moiety is a five or six membered heterocyclic ring;

(b)  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ , and  $R_6$  are selected from the group consisting of,

(i) hydrogen or alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, aldehyde, or trihalomethyl substituents;

(ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iii) an aldehyde or ketone of formula  $-CO-R_{20}$ , where  $R_{20}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

(iv) a carboxylic acid of formula  $-(R_{21})_n-COOH$  or ester of formula  $-(R_{22})-COO-R_{23}$ , where  $R_{21}$ ,  $R_{22}$ , and  $R_{23}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and m and n are independently 0 or 1;



(v) halogen or an alcohol of formula  $(R_{24})_m-OH$  or an ether of formula  $-(R_{24})_n-O-R_{25}$ , where  $R_{24}$  and  $R_{25}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(vi)  $-NR_{26}R_{27}$ , where  $R_{26}$  and  $R_{27}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring; or  $-NHCOR_{28}$ , where  $R_{28}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(vii)  $-SO_2NR_{29}R_{30}$ , where  $R_{29}$  and  $R_{30}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(viii) any two of  $R_3$ ,  $R_4$ ,  $R_5$ , or  $R_6$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring;

(c)  $R_7$ ,  $R_8$ ,  $R_9$ , and  $R_{10}$  are independently selected from the group consisting of,

(i) hydrogen or alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, aldehyde, or trihalomethyl substituents;

(ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iii) an aldehyde or ketone of formula  $-CO-R_{31}$ , where  $R_{31}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

225

(iv) a carboxylic acid of formula  $-(R_{32})_n\text{-COOH}$  or ester of formula  $-(R_{33})_m\text{-COO-}R_{34}$ , where  $R_{32}$ ,  $R_{33}$ , and  $R_{34}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  
5 n and m are independently 0 or 1;

(v) halogen or an alcohol of formula  $(R_{35})_m\text{-OH}$  or an ether of formula  $-(R_{35})_n\text{-O-}R_{36}$ , where  $R_{35}$  and  $R_{36}$  are independently chosen from the group consisting of alkyl or a five or six membered heterocyclic ring and m and n are  
10 independently 0 or 1;

(vi)  $\text{-NR}_{37}R_{38}$ , where  $R_{37}$  and  $R_{38}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring; or  $\text{-NHCOR}_{39}$ , where  $R_{39}$  is selected from the group consisting of  
15 hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(vii)  $\text{-SO}_2\text{NR}_{40}R_{41}$ , where  $R_{40}$  and  $R_{41}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and  
20 a five or six membered heterocyclic ring;

(viii) any two of  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered  
25 heterocyclic ring; and

(d)  $R_{11}$  is hydrogen or alkyl;  
provided that at least one of  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  is alkyl or provided that at least four of  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ , or  $R_6$  are not hydrogen.

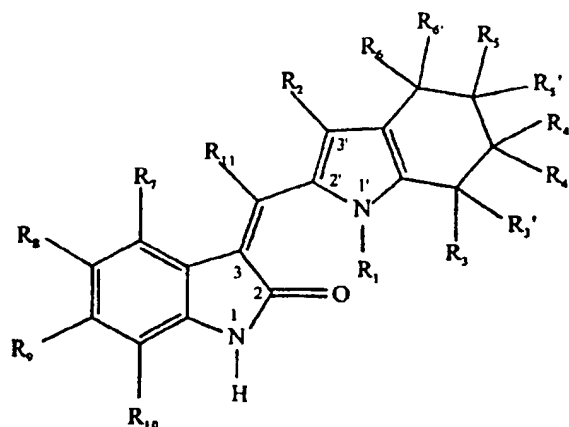
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7. An optionally substituted 3-[(tetrahydroindole-2-yl)methylene]-2-indolinone or 3-[(cyclopentano-b-pyrrol-2-yl)methylene]-2-indolinone compound.

226

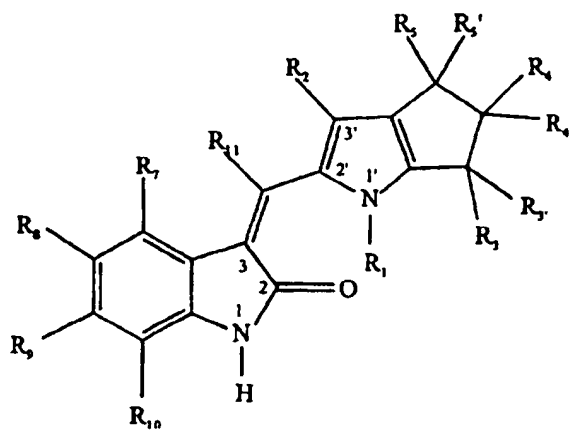
8. The indolinone compound of claim 7 of formula XIX or XX,

XIX



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XX



or a pharmaceutically acceptable salt, isomer, metabolite,  
10 ester, amide, or prodrug thereof

where (a)  $R_1$  is selected from the group consisting of,

- (i) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;
- (ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;
- (iii) ketone of formula  $-\text{CO}-R_{12}$ , where  $R_{11}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;
- (iv) a carboxylic acid of formula  $-(R_{13})_n-\text{COOH}$  or ester of formula  $-(R_{14})_m-\text{COO}-R_{15}$ , where  $R_{13}$ ,  $R_{14}$ , and  $R_{15}$  and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $n$  and  $m$  are independently 0 or 1;
- (v) a sulfone of formula  $-(\text{SO}_2)-R_{16}$ , where  $R_{16}$  is selected from the group consisting of alkyl or a five or six membered heterocyclic ring, where the ring is optionally substituted with an alkyl moiety;
- (vi)  $-(R_{17})_n-(\text{indole-1-yl})$  or  $-(R_{18})_m-\text{CHOH}-(R_{19})_p-(\text{indole-1-yl})$ , where the indole moiety is optionally substituted with an aldehyde and  $R_{17}$ ,  $R_{18}$ , and  $R_{19}$  are alkyl and  $n$ ,  $m$ , and  $p$  are independently 0 or 1;
- (vii) taken together with a 2' substituent of the indole ring forms a tricyclic moiety, where each ring in the tricyclic moiety is a five or six membered heterocyclic ring;

(b)  $R_2$ ,  $R_3$ ,  $R_3'$ ,  $R_4$ ,  $R_4'$ ,  $R_5$ ,  $R_5'$ ,  $R_6$ , and  $R_6'$  are selected from the group consisting of,

- (i) hydrogen;

(ii) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(iii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iv) ketone of formula  $\text{-CO-R}_{20}$ , where  $\text{R}_{20}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

(v) a carboxylic acid of formula  $\text{-(R}_{21})_n\text{-COOH}$  or ester of formula  $\text{-(R}_{22})\text{-COO-R}_{23}$ , where  $\text{R}_{21}$ ,  $\text{R}_{22}$ , and  $\text{R}_{23}$  and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(vi) halogen;

(vii) an alcohol of formula  $\text{(R}_{24})_m\text{-OH}$  or an ether of formula  $\text{-(R}_{24})_n\text{-O-R}_{25}$ , where  $\text{R}_{24}$  and  $\text{R}_{25}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(viii)  $\text{-NR}_{26}\text{R}_{27}$ , where  $\text{R}_{26}$  and  $\text{R}_{27}$  are independently selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(ix)  $\text{-NHCOR}_{28}$ , where  $\text{R}_{28}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(x)  $\text{-SO}_2\text{NR}_{29}\text{R}_{30}$ , where  $\text{R}_{29}$  and  $\text{R}_{30}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(xi) any two of  $R_3$ ,  $R_3$ ,  $R_4$ ,  $R_4$ ,  $R_5$ ,  $R_5$ ,  $R_6$ , or  $R_6$ , taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six  
5 membered heterocyclic ring;

(c)  $R_7$ ,  $R_8$ ,  $R_9$ , and  $R_{10}$  are independently selected from the group consisting of,

(i) hydrogen;

(ii) alkyl that is optionally substituted with  
10 a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(iii) five, six, eight, nine, or ten membered  
15 monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iv) ketone of formula  $-\text{CO}-R_{31}$ , where  $R_{31}$  is selected from the group consisting of hydrogen, alkyl, or  
20 a five or six membered heterocyclic ring;

(v) a carboxylic acid of formula  $-(R_{32})_n-\text{COOH}$  or ester of formula  $-(R_{33})_m-\text{COO}-R_{34}$ , where  $R_{32}$ ,  $R_{33}$ , and  $R_{34}$  and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  
25  $n$  and  $m$  are independently 0 or 1;

(vi) halogen;

(vii) an alcohol of formula  $(R_{35})_m-\text{OH}$  or an ether of formula  $-(R_{35})_n-\text{O}-R_{36}$ , where  $R_{35}$  and  $R_{36}$  are independently chosen from the group consisting of alkyl or a five or six  
30 membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(viii)  $-\text{NR}_{37}R_{38}$ , where  $R_{37}$  and  $R_{38}$  are independently selected from the group consisting of hydrogen,

oxygen, alkyl, and a five or six membered heterocyclic ring;

(ix)  $\text{-NHCOR}_{39}$ , where  $R_{39}$  is selected from the group consisting of hydroxyl, alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(x)  $\text{-SO}_2\text{NR}_{40}\text{R}_{41}$ , where  $R_{40}$  and  $R_{41}$  are selected from the group consisting of hydrogen, oxygen, alkyl, and a five or six membered heterocyclic ring;

(xi) any two of  $R_7$ ,  $R_8$ ,  $R_9$ , or  $R_{10}$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the indole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring; and

(d)  $R_{11}$  is hydrogen or alkyl

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9. An indolinone compound having a substituent at the 5 position of the oxindole ring, where the substituent at the 5 position of the oxindole ring is selected from the group consisting of

(a) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(b) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(c) a ketone of formula  $\text{-CO-R}_{10}$ , where  $R_{10}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

(d) a carboxylic acid of formula  $\text{-(R}_{11}\text{)}_n\text{-COOH}$  or ester of formula  $\text{-(R}_{12}\text{)-COO-R}_{13}$ , where  $R_{11}$ ,  $R_{12}$ , and  $R_{13}$

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231

and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and m and n are independently 0 or 1;

(e) halogen;

5 (f) an alcohol of formula  $(R_{14})_m\text{-OH}$  or an ether of formula  $-(R_{14})_n\text{-O-}R_{15}$ , where  $R_{14}$  and  $R_{15}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and m and n are independently 0 or 1;

10 (g)  $\text{-NR}_{16}R_{17}$ , where  $R_{16}$  and  $R_{17}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(h)  $\text{-NHCOR}_{18}$ , where  $R_{18}$  is selected from the group consisting of alkyl, and a five or six membered  
15 heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(i)  $\text{-SO}_2\text{NR}_{19}R_{20}$ , where  $R_{19}$  and  $R_{20}$  are selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

20 (j) any two of  $R_4$ ,  $R_5$ ,  $R_6$ , or  $R_7$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the oxindole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring.

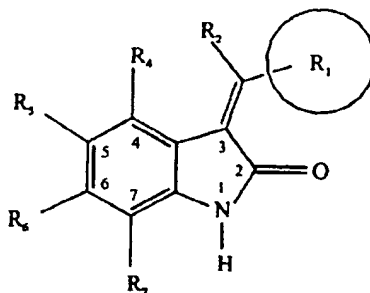
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10. The compound of claim 9 of the following formula,

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232



where (a)  $R_3$  is selected from the group consisting of,

- (i) alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;
- (ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;
- (iii) a ketone of formula  $-CO-R_{10}$ , where  $R_{10}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;
- (iv) a carboxylic acid of formula  $-(R_{11})_n-COOH$  or ester of formula  $-(R_{12})-COO-R_{13}$ , where  $R_{11}$ ,  $R_{12}$ , and  $R_{13}$  are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;
- (v) halogen;
- (vi) an alcohol of formula  $(R_{14})_m-OH$  or an ether of formula  $-(R_{14})_n-O-R_{15}$ , where  $R_{14}$  and  $R_{15}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and  $m$  and  $n$  are independently 0 or 1;

(vii)  $-NR_{16}R_{17}$ , where  $R_{16}$  and  $R_{17}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(viii)  $-NHCOR_{18}$ , where  $R_{18}$  is selected from the group consisting of alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(ix)  $-SO_2NR_{19}R_{20}$ , where  $R_{19}$  and  $R_{20}$  are selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(x) any two of  $R_4$ ,  $R_5$ ,  $R_6$ , or  $R_7$  taken together form a bicyclic or tricyclic heterocyclic moiety fused to the six membered ring of the oxindole, where each ring in the multicyclic moiety is a five or six membered heterocyclic ring;

(b)  $R_1$  is selected from the group consisting of a five, six, eight, nine, and ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more substituents selected from the group consisting of

(i) hydrogen and alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or trihalomethyl substituents;

(iii) a ketone of formula  $-CO-R_{21}$ , where  $R_{21}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

(iv) a carboxylic acid of formula  $-(R_{22})_n-COOH$  or ester of formula  $-(R_{23})-COO-R_{24}$ , where  $R_{22}$ ,  $R_{23}$ , and  $R_{24}$

and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and m and n are independently 0 or 1;

(v) halogen;

5 (vi) an alcohol of formula  $(R_{25})_m\text{-OH}$  or an ether of formula  $-(R_{25})_n\text{-O-}R_{26}$ , where  $R_{25}$  and  $R_{26}$  are independently selected from the group consisting of alkyl and a five or six membered heterocyclic ring and m and n are independently 0 or 1;

10 (vii)  $\text{-NR}_{27}R_{28}$ , where  $R_{27}$  and  $R_{28}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

(viii)  $\text{-NHCOR}_{29}$ , where  $R_{29}$  is selected from the group consisting of alkyl, and a five or six membered  
15 heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(ix)  $\text{-SO}_2\text{NR}_{30}R_{31}$ , where  $R_{30}$  and  $R_{31}$  are selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

20 (c)  $R_4$ ,  $R_6$ , and  $R_7$  are independently selected from the group consisting of,

(i) hydrogen and alkyl that is optionally substituted with a monocyclic or bicyclic five, six, eight, nine, or ten membered heterocyclic ring, where the  
25 ring is optionally substituted with one or more halogen, or trihalomethyl substituents;

(ii) five, six, eight, nine, or ten membered monocyclic or bicyclic heterocyclic ring, where the ring is optionally substituted with one or more halogen or  
30 trihalomethyl substituents;

(iii) a ketone of formula  $\text{-CO-}R_{32}$ , where  $R_{32}$  is selected from the group consisting of hydrogen, alkyl, or a five or six membered heterocyclic ring;

235

(iv) a carboxylic acid of formula  $-(R_{33})_n\text{-COOH}$  or ester of formula  $-(R_{34})\text{-COO-}R_{35}$ , where  $R_{33}$ ,  $R_{34}$ , and  $R_{35}$  and are independently selected from the group consisting of alkyl or a five or six membered heterocyclic ring and  
 5 m and n are independently 0 or 1;

(v) halogen;

(vi) an alcohol of formula  $(R_{36})_m\text{-OH}$  or an ether of formula  $-(R_{36})_n\text{-O-}R_{37}$ , where  $R_{36}$  and  $R_{37}$  are independently selected from the group consisting of alkyl and a five or  
 10 six membered heterocyclic ring and m and n are independently 0 or 1;

(vii)  $\text{-NR}_{38}R_{39}$ , where  $R_{38}$  and  $R_{39}$  are independently selected from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring;

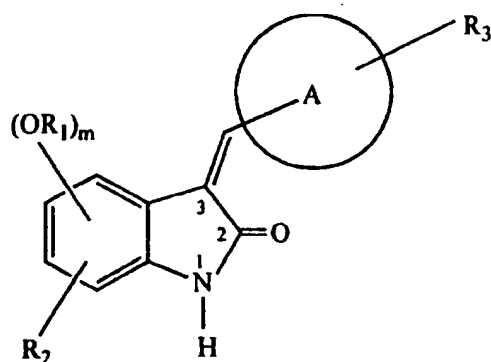
(viii)  $\text{-NHCOR}_{40}$ , where  $R_{40}$  is selected from the group consisting of alkyl, and a five or six membered heterocyclic ring, where the ring is optionally substituted with alkyl, halogen, carboxylate, or ester;

(ix)  $\text{-SO}_2\text{NR}_{41}R_{42}$ , where  $R_{41}$  and  $R_{42}$  are selected  
 20 from the group consisting of hydrogen, alkyl, and a five or six membered heterocyclic ring; and

(d)  $R_2$  is hydrogen or alkyl.

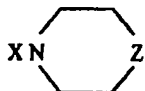
11. A compound having formula XXI, wherein:

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## XXI

- (a) A is a five or six membered ring comprised of atoms selected from the group consisting of oxygen, carbon, sulfur and nitrogen;
- (b) m is zero, 1, or 2;
- (c)  $R_1$  is hydrogen,  $C_1$ - $C_6$  alkyl or  $C_2$ - $C_6$  alkanoyl;
- (d) one of  $R_2$  and  $R_3$  independently is hydrogen and the other is a substituent selected from:
- (1) a  $C_1$ - $C_6$  alkyl group substituted by 1, 2 or 3 hydroxy groups;
  - (2)  $SO_3R_4$  in which  $R_4$  is hydrogen or  $C_1$ - $C_6$  alkyl unsubstituted or substituted by 1, 2 or 3 hydroxy groups;
  - (3)  $SO_2NHR_5$  in which  $R_5$  is as  $R_4$  defined above or a  $-(CH_2)_n-N(C_1-C_6 \text{ alkyl})_2$  group in which n is 2 or 3;
  - (4)  $COOR_6$  in which  $R_6$  is  $C_1$ - $C_6$  alkyl unsubstituted or substituted by phenyl or by 1, 2 or 3 hydroxy groups or phenyl;
  - (5)  $CONHR_7$  in which  $R_7$  is hydrogen, phenyl or  $C_1$ - $C_6$  alkyl substituted by 1, 2 or 3 hydroxy groups or by phenyl;
  - (6)  $NHSO_2R_8$  in which  $R_8$  is  $C_1$ - $C_6$  alkyl or phenyl unsubstituted or substituted by halogen or by  $C_1$ - $C_4$  alkyl;
  - (7)  $N(R_9)_2$ ,  $NHR_9$  or  $OR_9$ , wherein  $R_9$  is  $C_2$ - $C_6$  alkyl substituted by 1, 2 or 3 hydroxy groups;
  - (8)  $NHCOR_{10}$ ,  $OOCR_{10}$  or  $CH_2OOCR_{10}$  in which  $R_{10}$  is  $C_1$ - $C_6$  alkyl substituted by 1, 2 or 3 hydroxy groups;
  - (9)  $NHCONH_2$ ;  $NH-C(NH_2)=NH$ ;  $C(NH_2)=NH$ ;  $CH_2NHC(NH_2)=NH$ ;  $CH_2NH_2$ ;  $OPO(OH)_2$ ;  $CH_2OPO(OH)_2$ ;  $PO(OH)_2$ ; or a



wherein X is selected from the group consisting of  $CH_2$ ,  $SO_2$ , CO, or  $NHCO(CH_2)_p$  in which p is 1, 2, or 3 and Z is  $CH_2$ ,

O or N-R<sub>11</sub> in which R<sub>11</sub> is hydrogen or is as R<sub>9</sub> defined above.

12. A method of making an indolinone compound of any  
5 one of claims 5-11 comprising the steps of reaching an appropriate aldehyde and oxindol and separating the indolinone from the aldehyde and oxindol reactants.

13. A pharmaceutical composition comprising (i) a  
10 pharmaceutically acceptable carrier or excipient and (ii) a compound according to any one of claims 5-11.

14. A method for treating a disease related to unregulated tyrosine kinase signal transduction, the  
15 method comprising the step of administering to a subject in need thereof a therapeutically effective amount of a compound according to any one of claims 5-11.

15. A method for regulating tyrosine kinase signal  
20 transduction comprising administering to a subject a therapeutically effective amount of a compound according to any one of claims 5-11.

16. A method of preventing or treating an abnormal  
25 condition in an organism, where the abnormal condition is associated with an aberration in a signal transduction pathway characterized by an interaction between a protein kinase and a natural binding partner, where the method comprises the following steps:

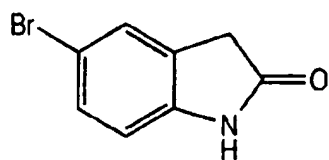
30 (a) administering a compound of any one of claims 5-11 to an organism; and

(b) promoting or disrupting the abnormal interaction.

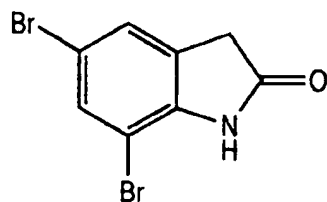
17. A method of preventing or treating an abnormal condition in an organism, where the abnormal condition is associated with an aberration in a signal transduction pathway characterized by an interaction between a protein  
5 kinase and a natural binding partner, where the method comprises the following steps:

(a) administering a compound of any one of claims 5-11 to an organism; and

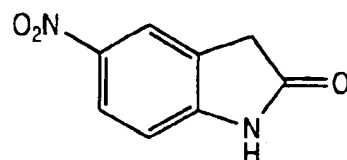
(b) promoting or disrupting the abnormal interac-  
10 tion.



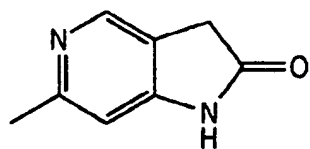
O1



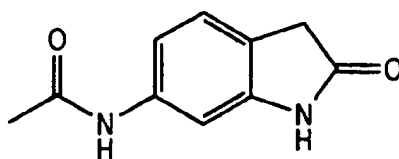
O2



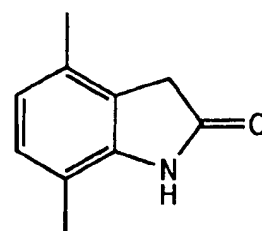
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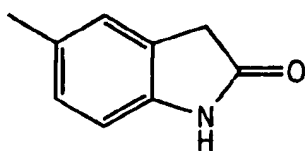
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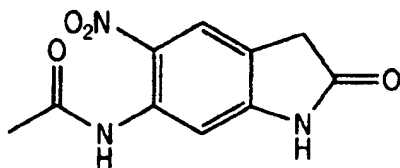
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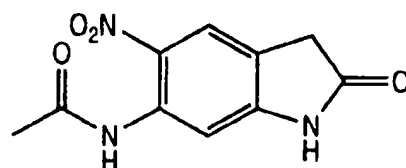
O6



O7



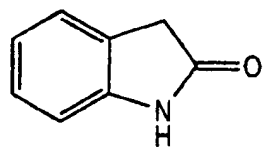
O8



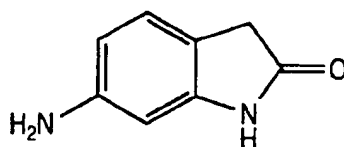
O9

*FIG. 1A.*

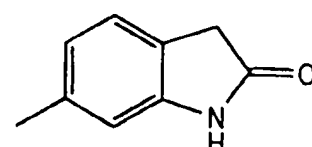




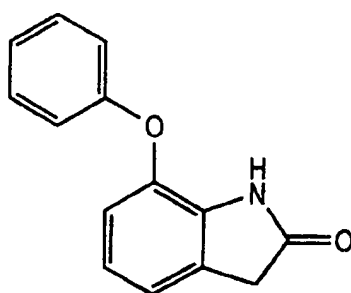
O10



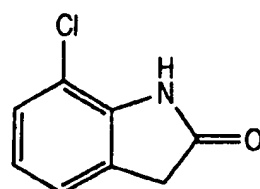
O11



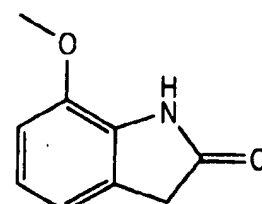
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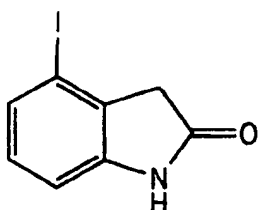
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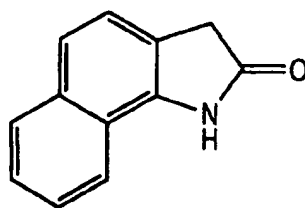
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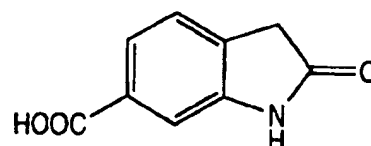
O15



O16

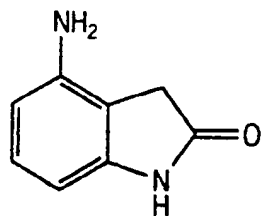


O17

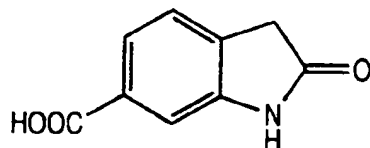


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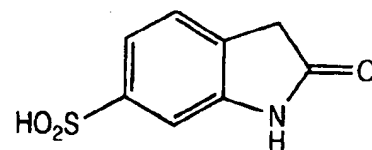
*FIG. 1B.*



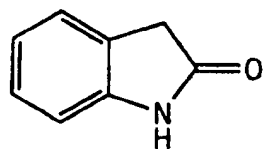
O19



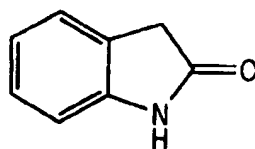
O20



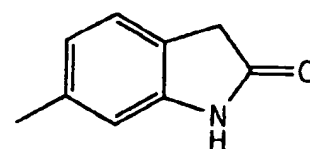
O21



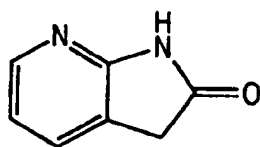
O22



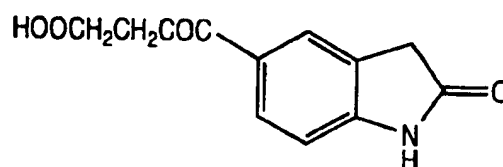
O23



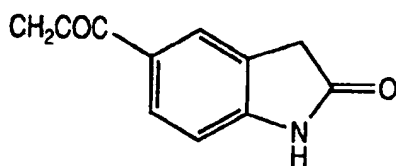
O24



O25



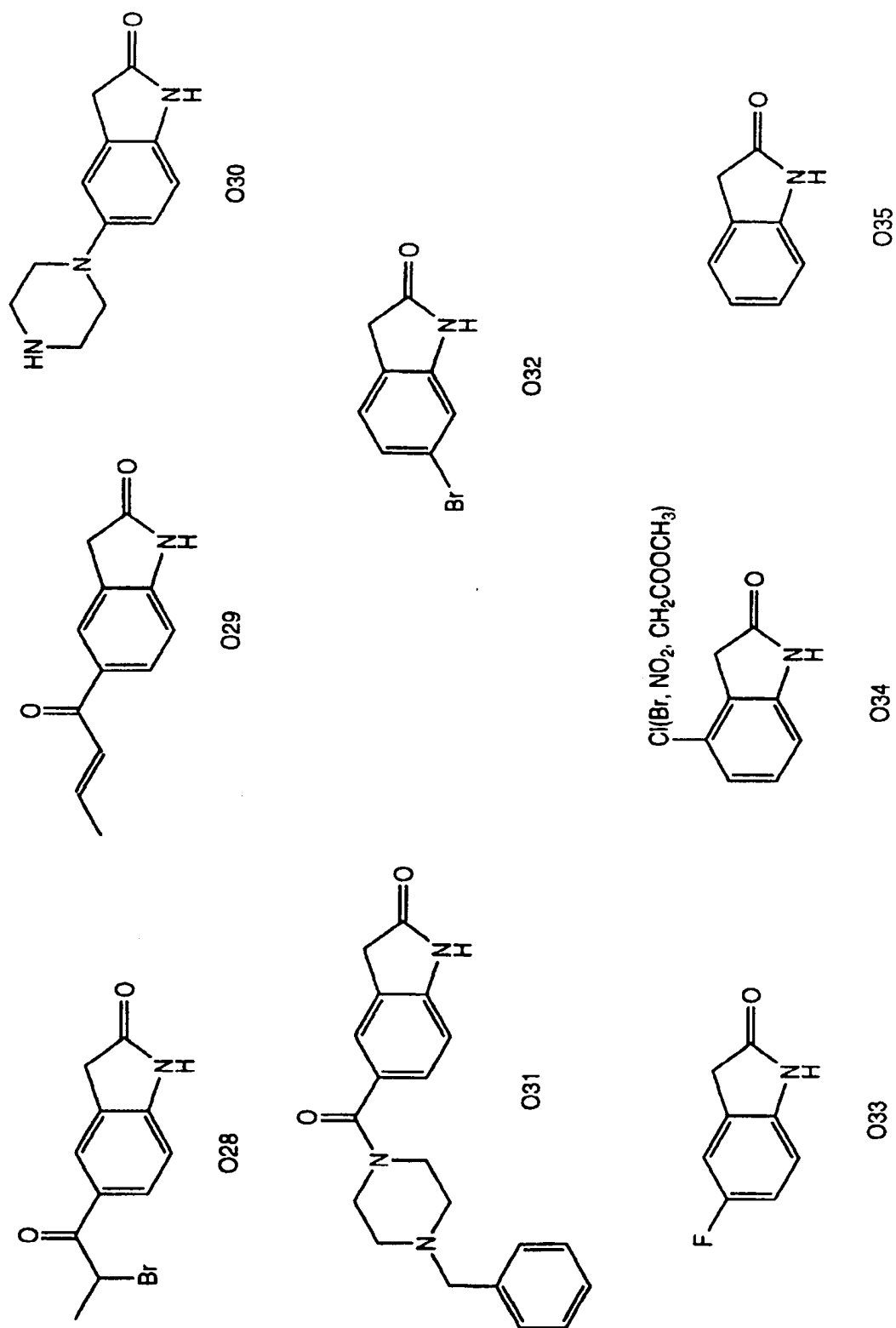
O26

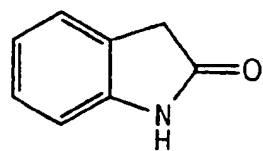


O27

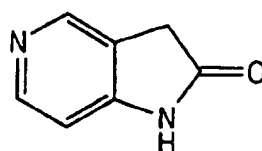
*FIG. 1C.*

FIG. 1D.

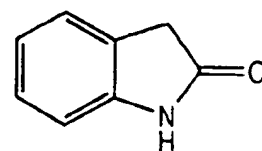




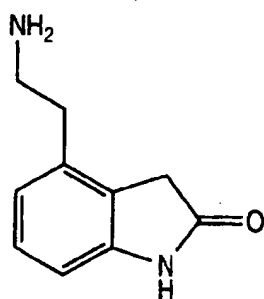
O36



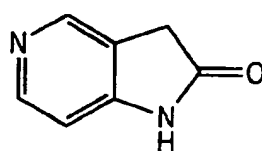
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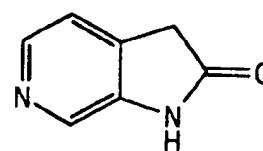
O38



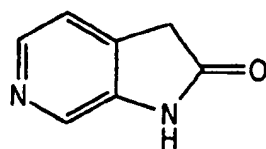
O39



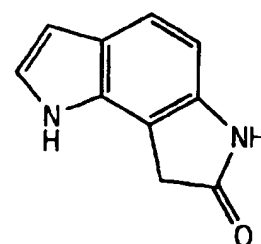
O40



O42

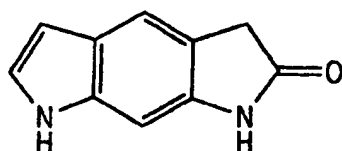


O42



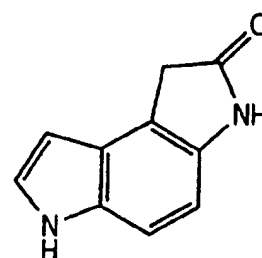
Oxindole [4,5-b] pyrrole

O43



Oxindole [4,5-b] pyrrole

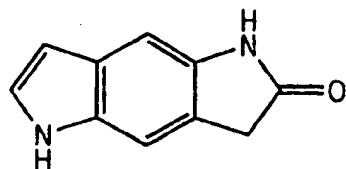
O44



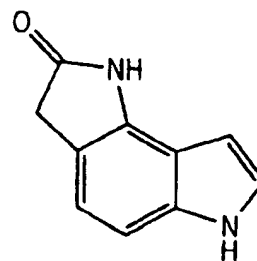
Oxindole [4,5-b] pyrrole

O45

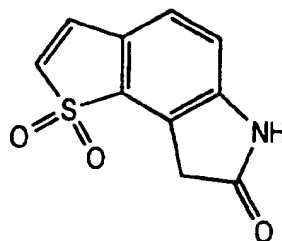
*FIG. 1E.*



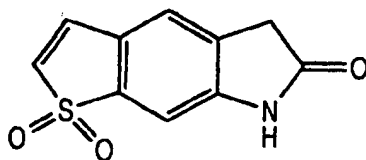
O48



O50

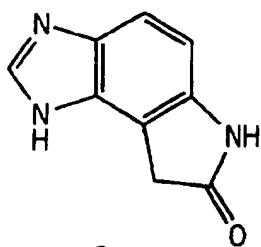


O52

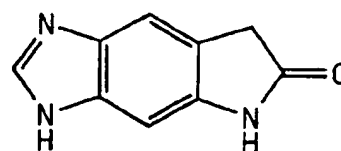


O53

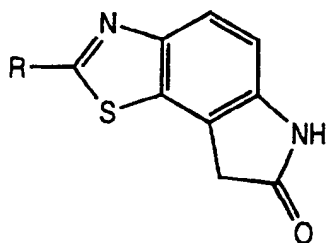
FIG. 1F.



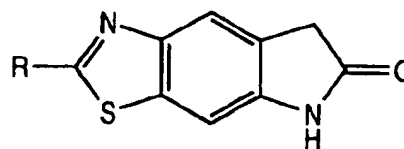
O55



O56

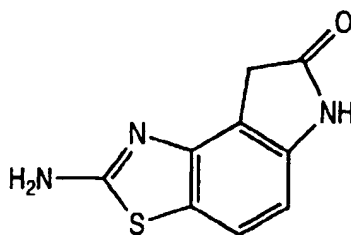


O58

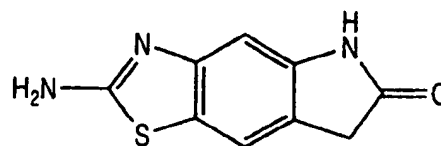


O59

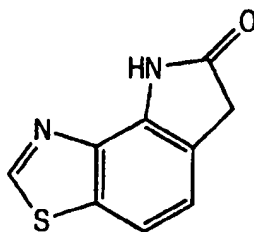
*FIG. 1G.*



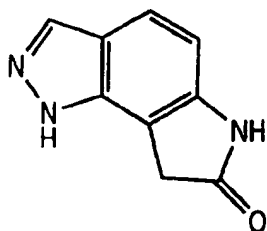
O61



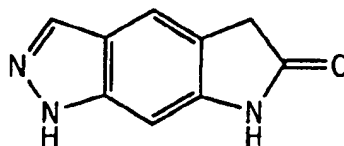
O62



O64

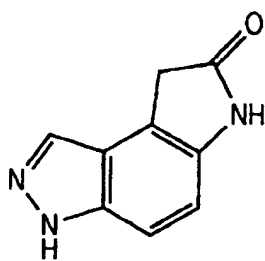


O66

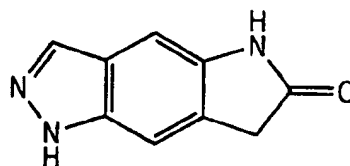


O67

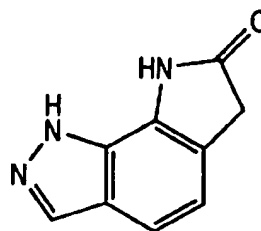
FIG. 1H.



O69



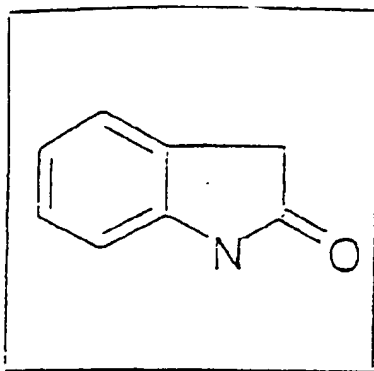
O70



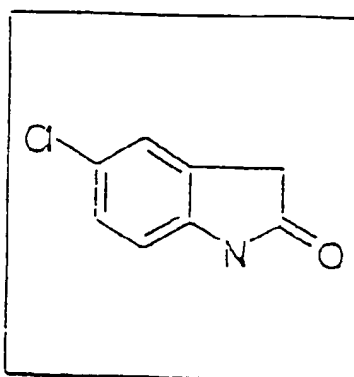
O73

FIG. 11

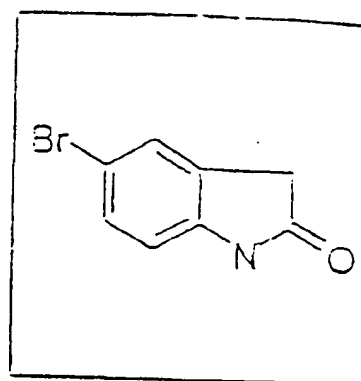




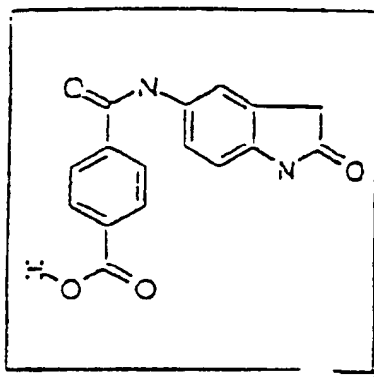
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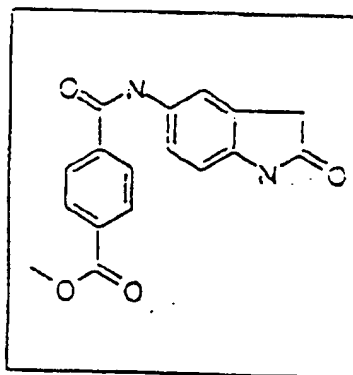
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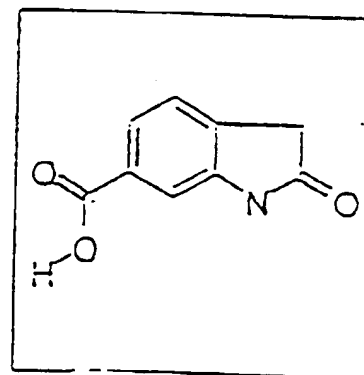
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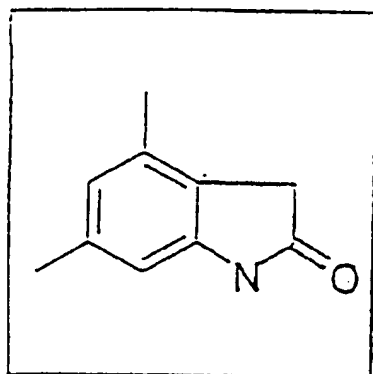
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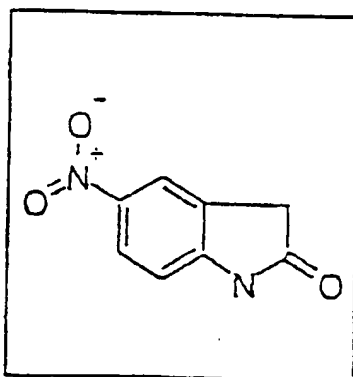
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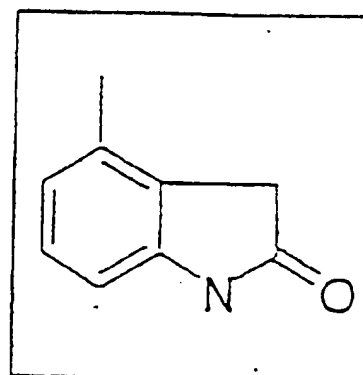
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080

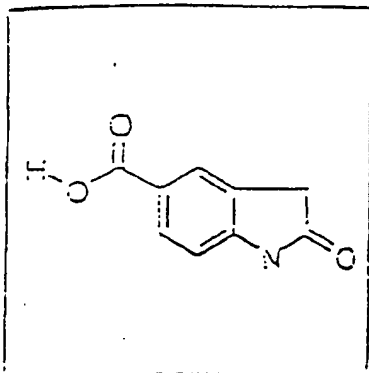


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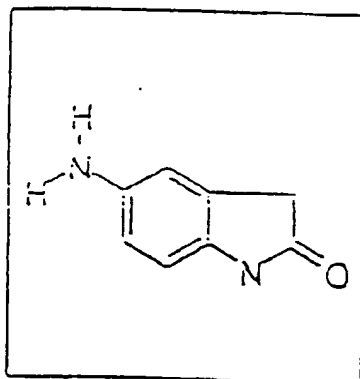


082

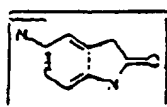
11 / 42



C83

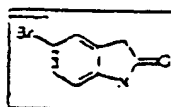


C84



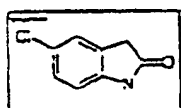
Chemical Name	
Chemical Formula	
Chemical Structure	
Chemical Name	
Chemical Formula	
Chemical Structure	

C85



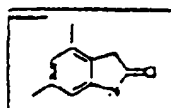
Chemical Name	
Chemical Formula	
Chemical Structure	
Chemical Name	
Chemical Formula	
Chemical Structure	

C86



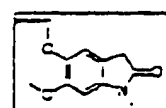
Chemical Name	
Chemical Formula	
Chemical Structure	
Chemical Name	
Chemical Formula	
Chemical Structure	

C87



Chemical Name	
Chemical Formula	
Chemical Structure	
Chemical Name	
Chemical Formula	
Chemical Structure	

C88



Chemical Name	
Chemical Formula	
Chemical Structure	
Chemical Name	
Chemical Formula	
Chemical Structure	

C89

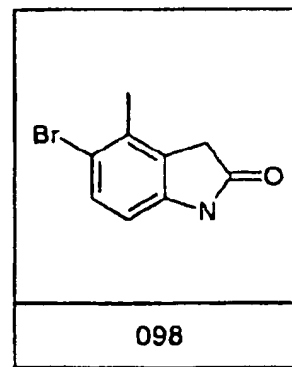
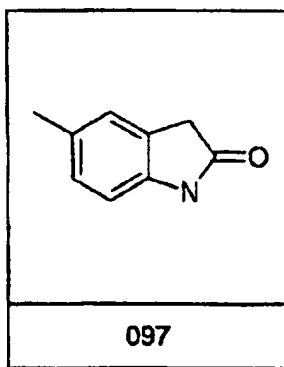
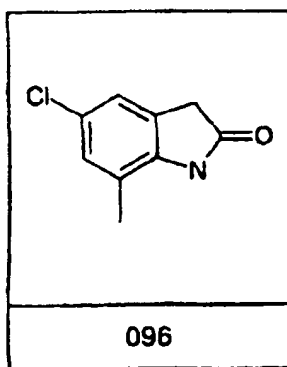
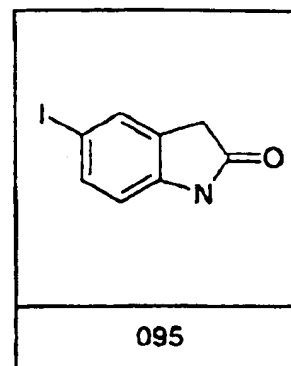
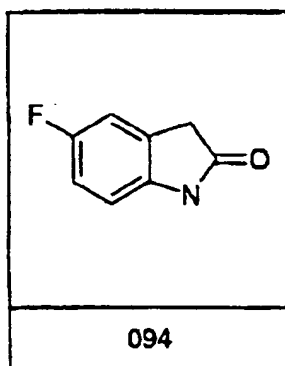
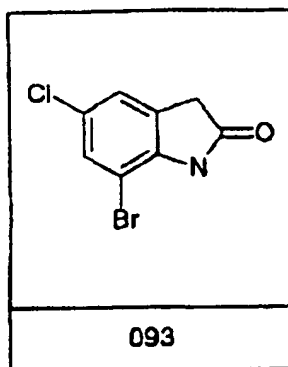
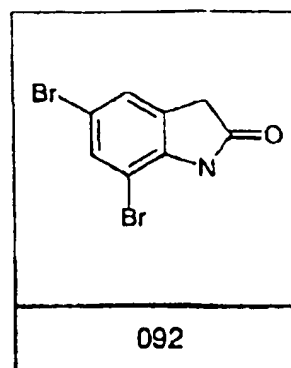
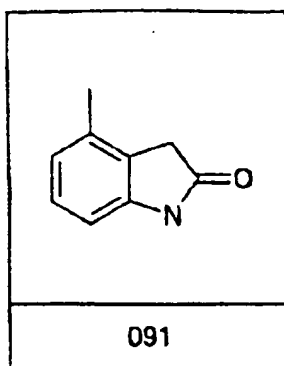
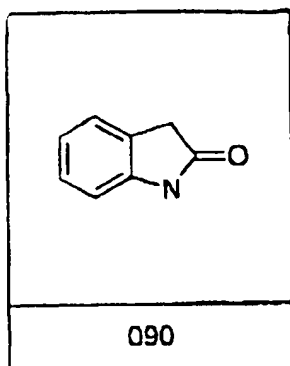
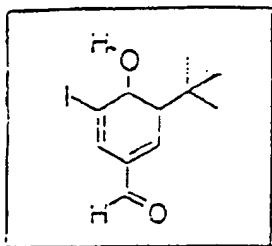
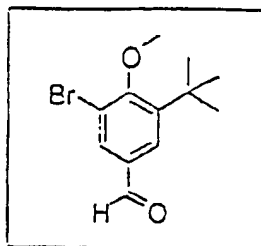


Figure 1, Sheet 12 of 12

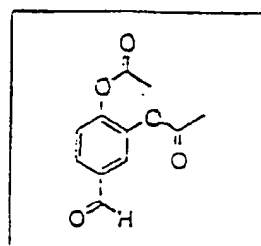
13 / 42



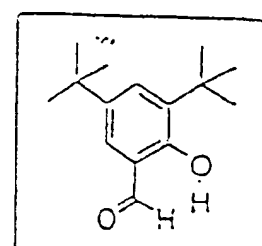
A1



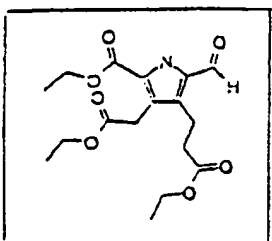
A2



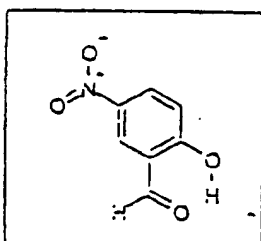
A3



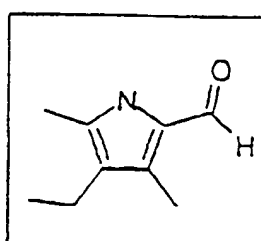
A4



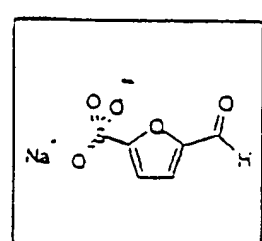
A5



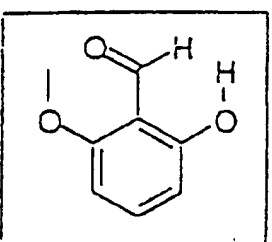
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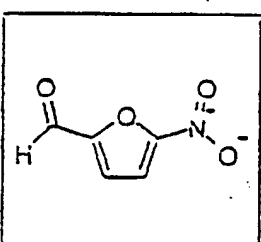
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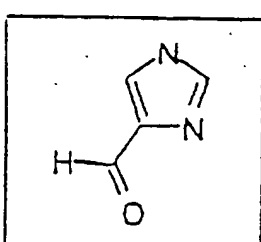
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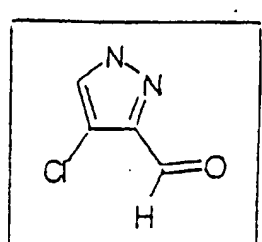
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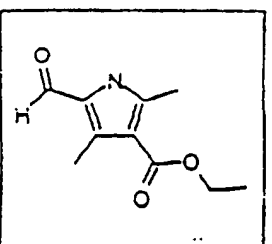
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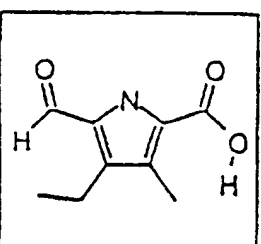
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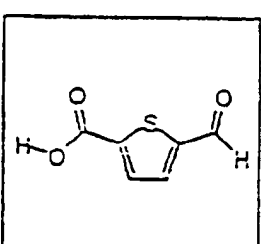
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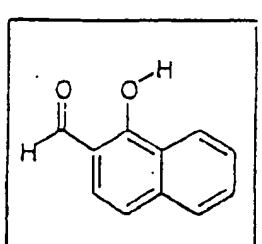
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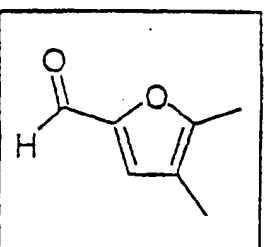
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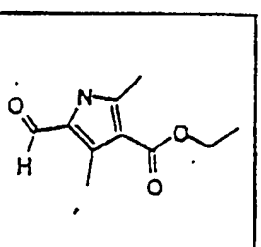
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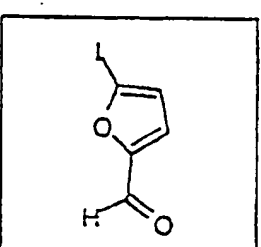
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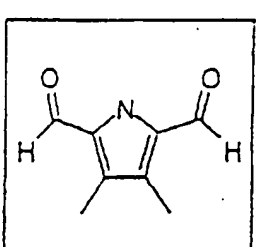
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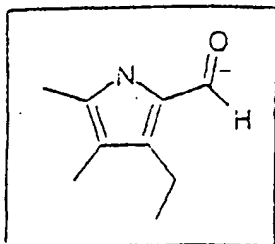


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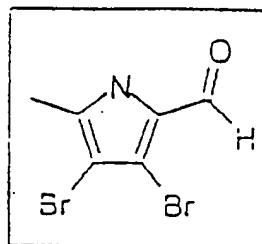


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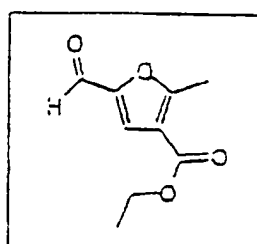
Figure 2, Sheet 1 of 30



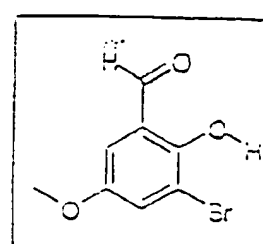
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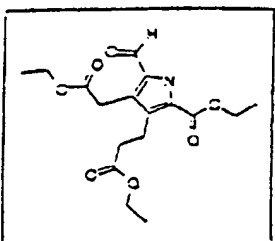
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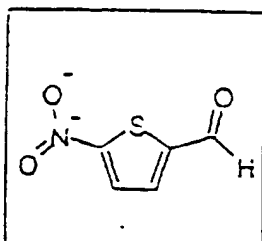
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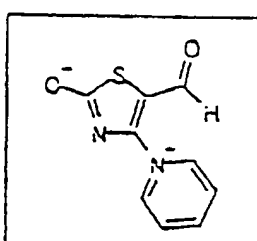
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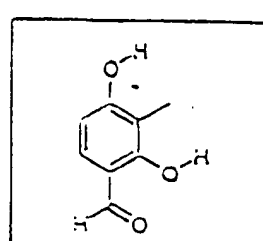
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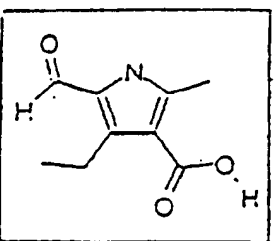
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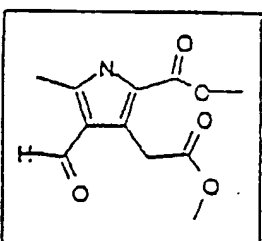
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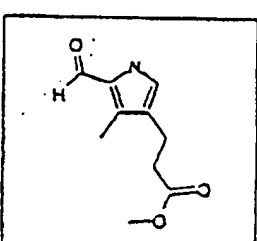
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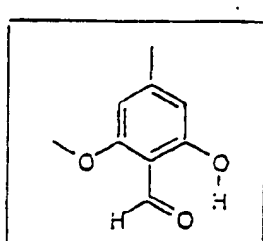
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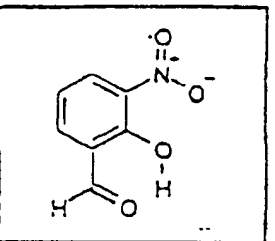
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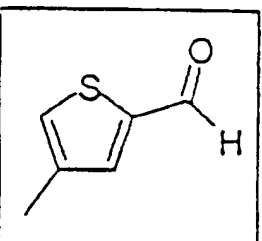
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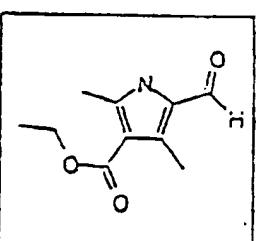
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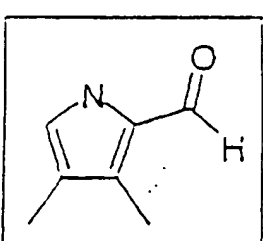
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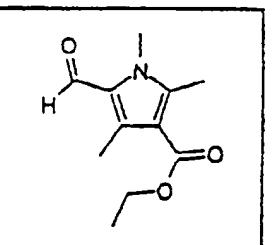
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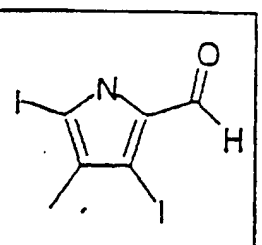
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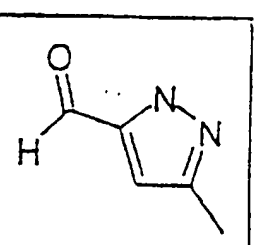
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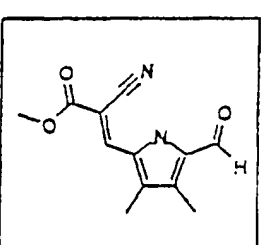
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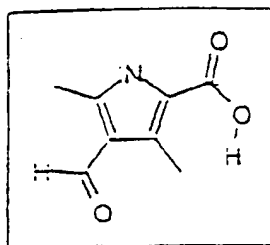
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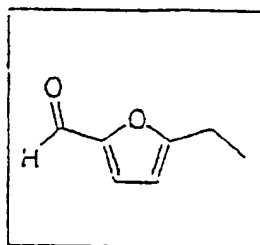
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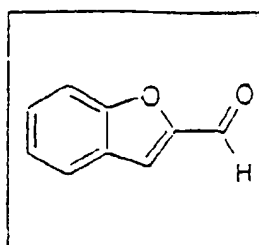
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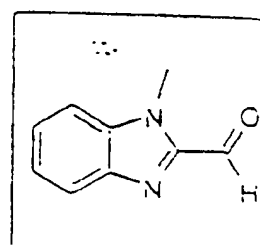
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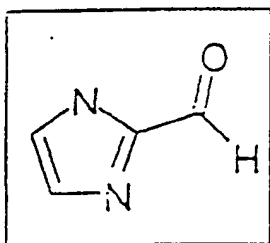
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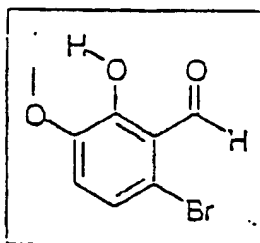
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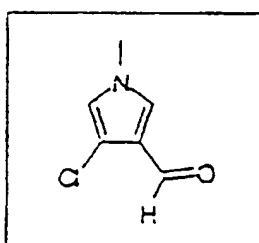
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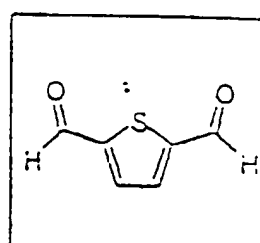
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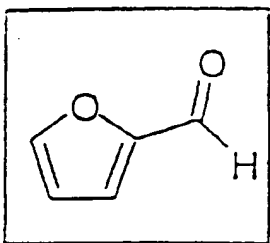
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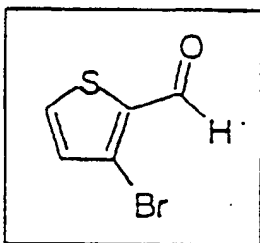
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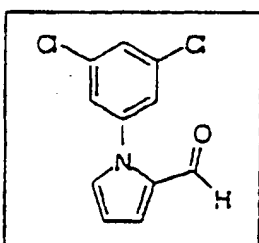
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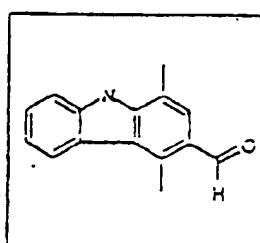
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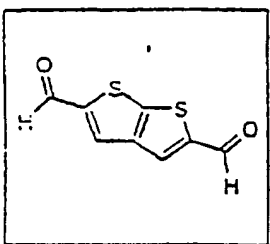
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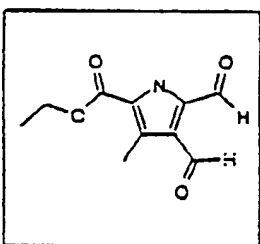
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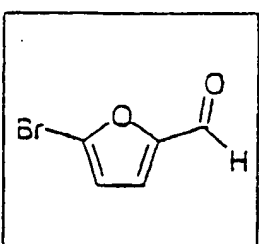
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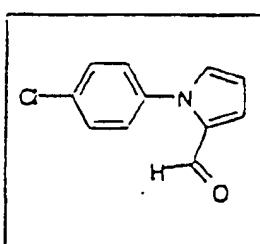
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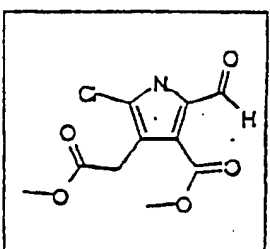
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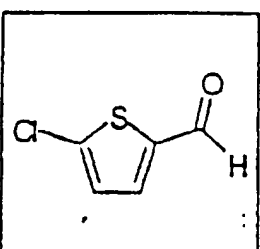
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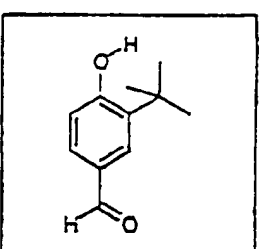
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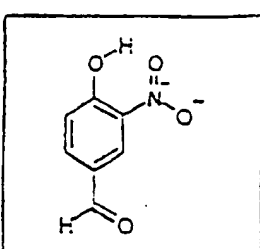
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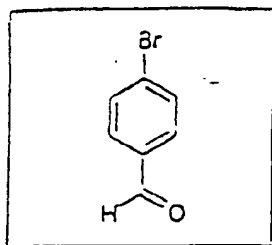


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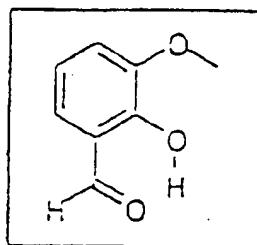


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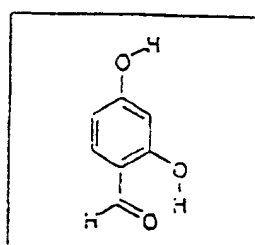
Figure 2, Sheet 3 of 30



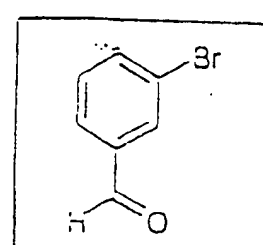
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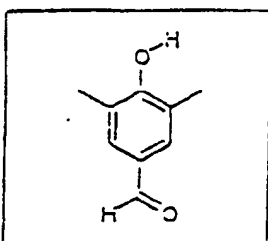
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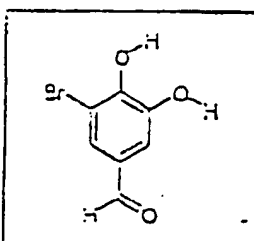
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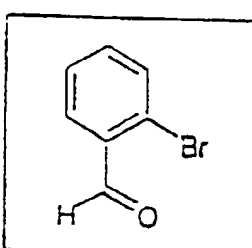
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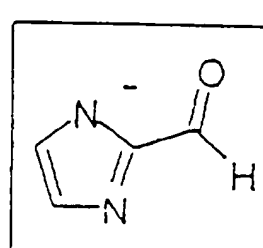
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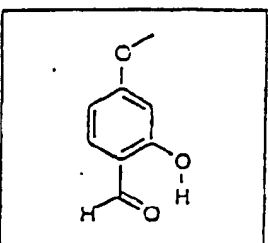
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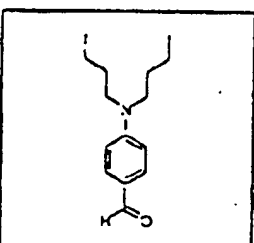
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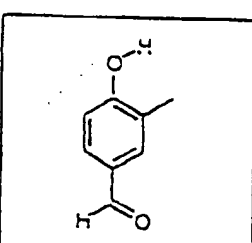
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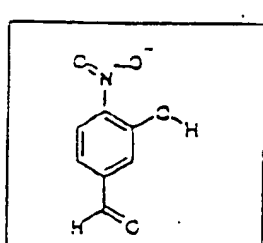
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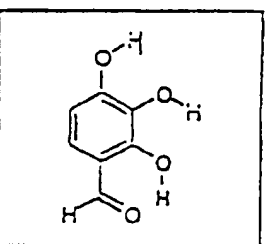
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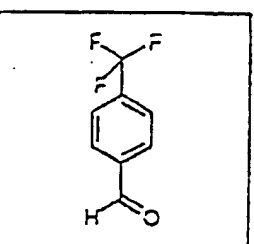
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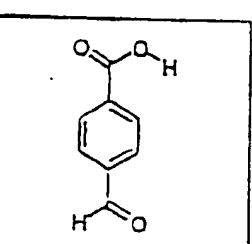
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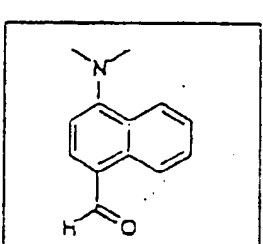
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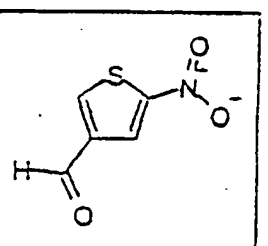
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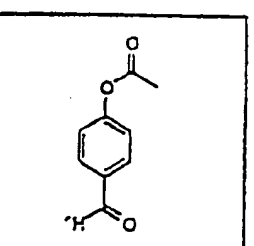
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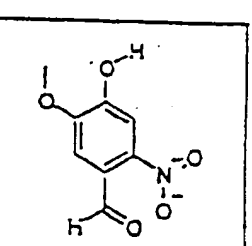
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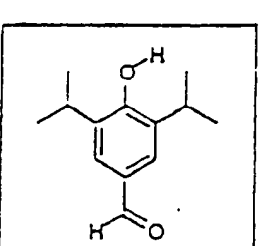
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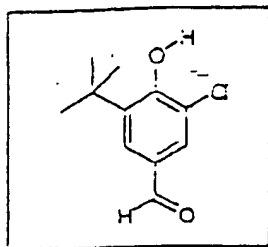


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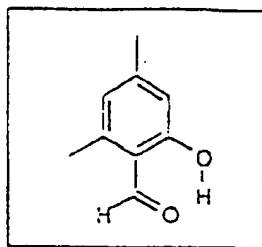


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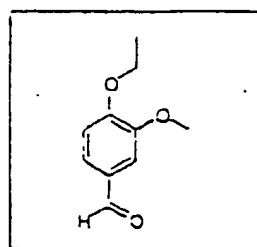
Figure 2, Sheet 4 of 30



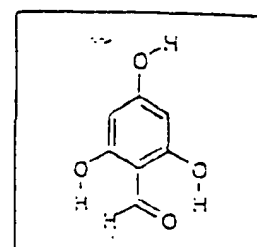
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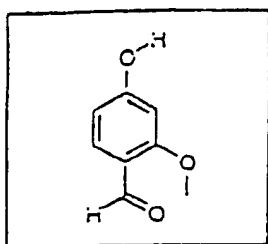
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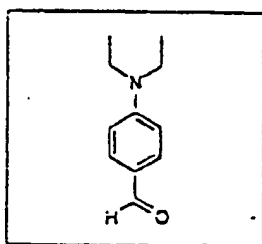
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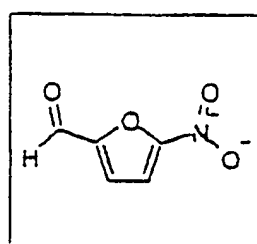
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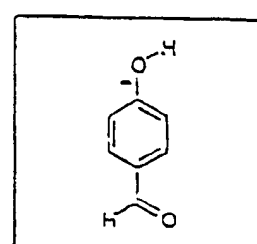
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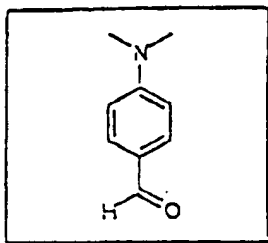
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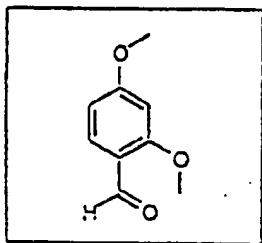
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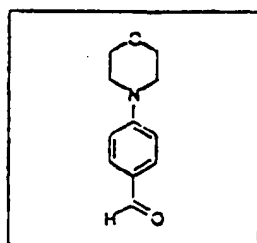
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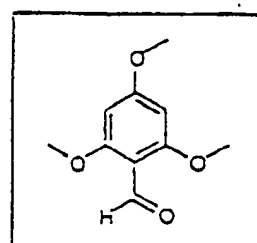
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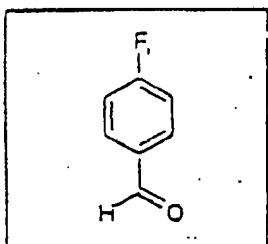
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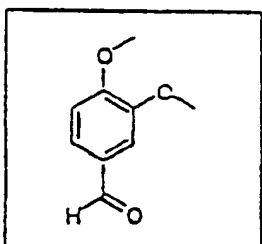
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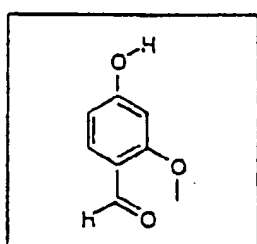
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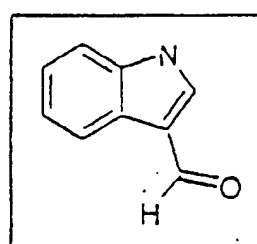
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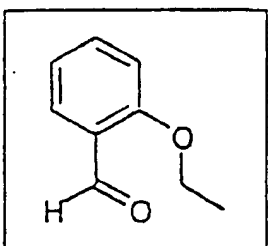
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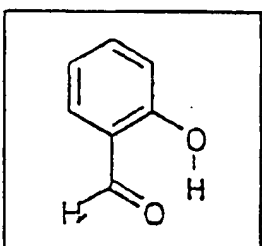
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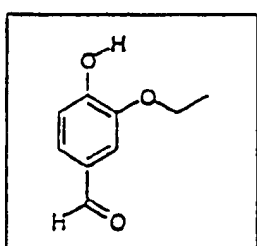
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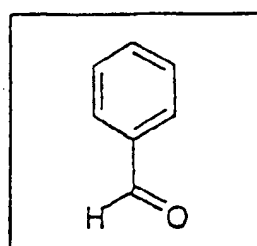
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A98



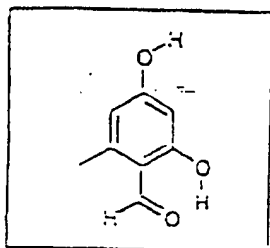
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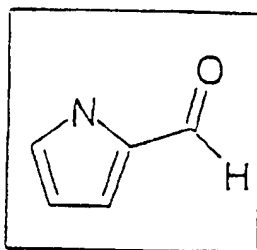
A100

Figure 2, Sheet 5 of 30

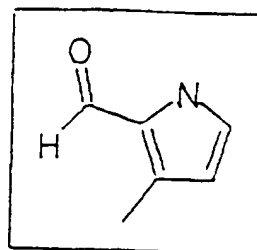




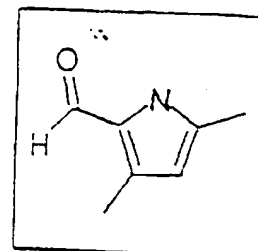
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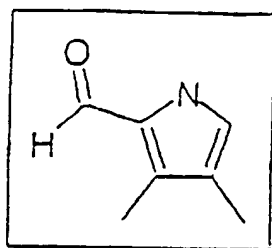
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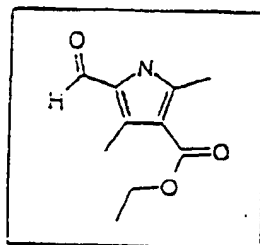
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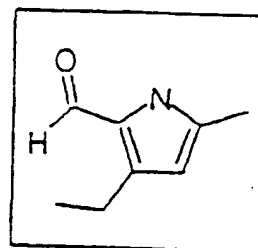
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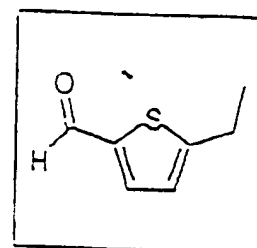
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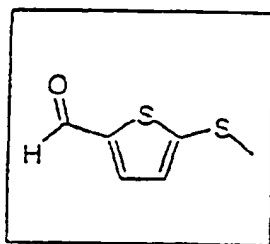
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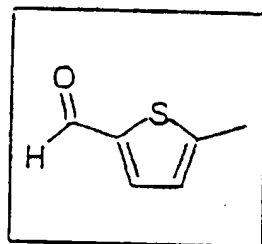
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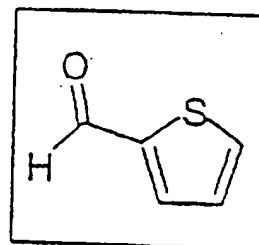
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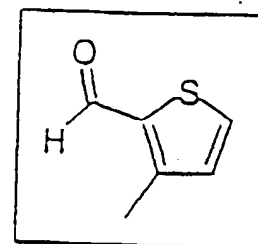
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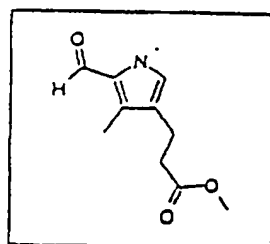
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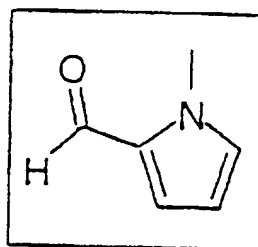
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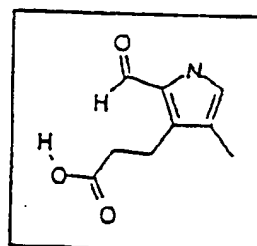
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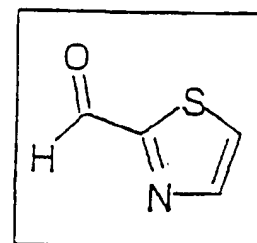
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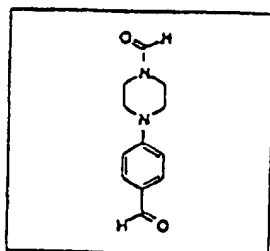
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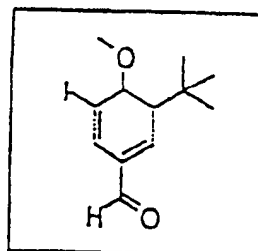
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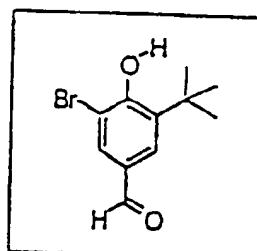
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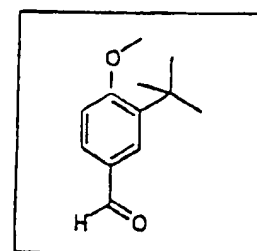
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A118



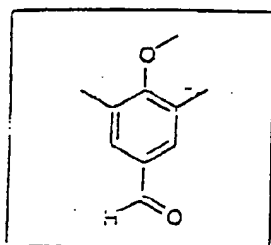
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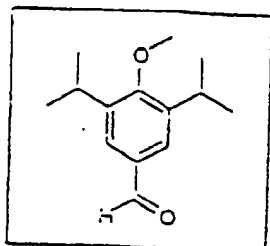
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Figure 2, Sheet 6 of 30

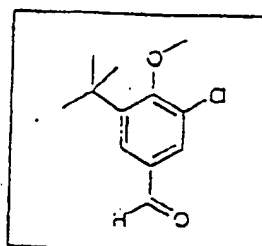
19 / 42



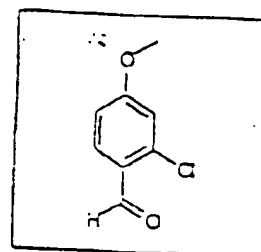
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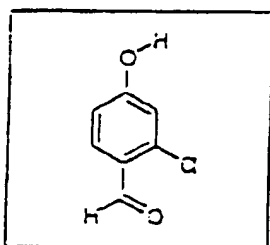
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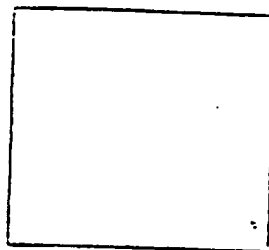
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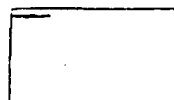


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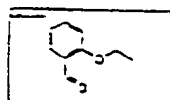


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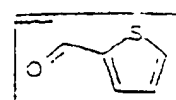




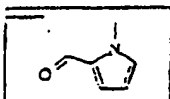
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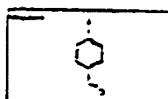


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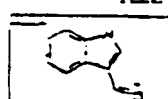
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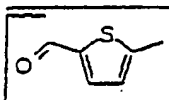
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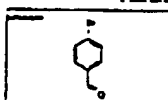
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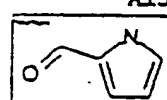
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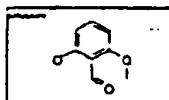
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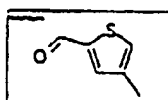
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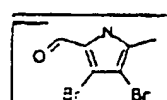
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A133



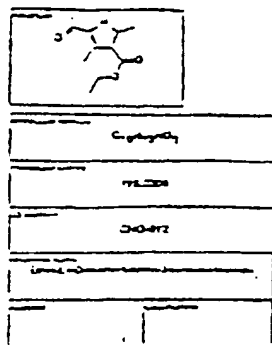
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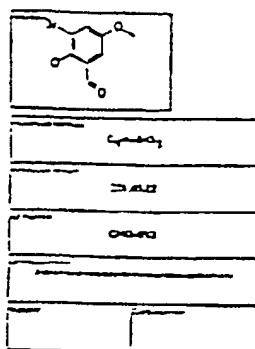
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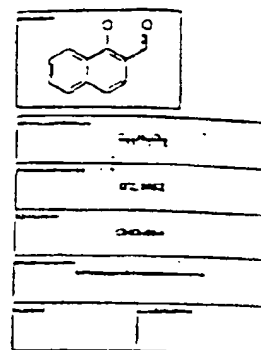
21 / 42



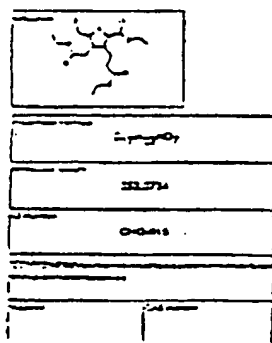
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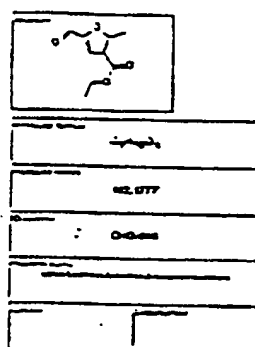
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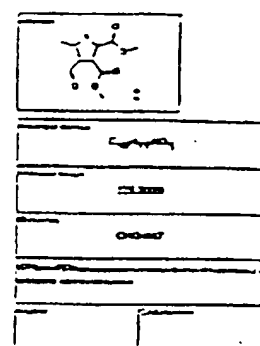
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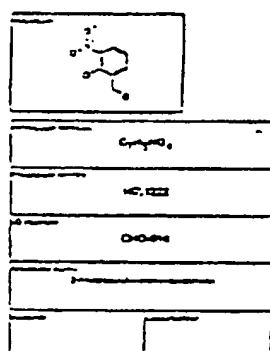
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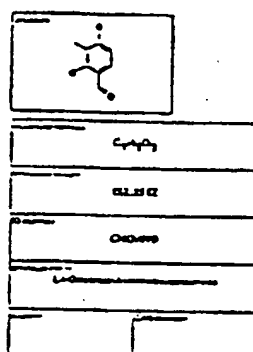
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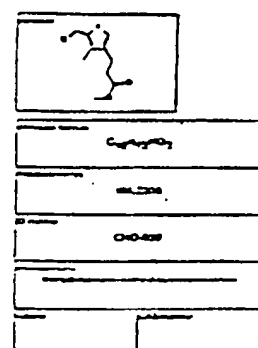
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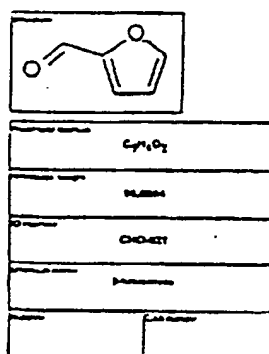
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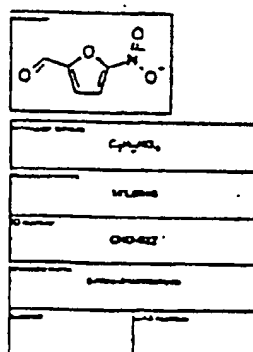
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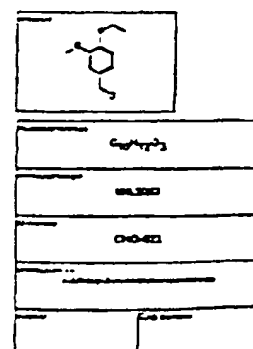
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A146

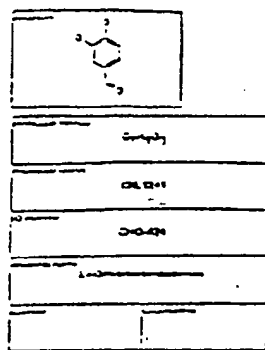


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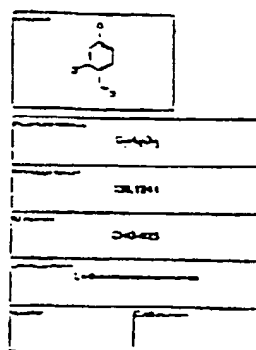


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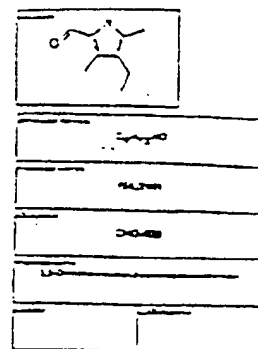
Figure 2, Sheet 9 of 30



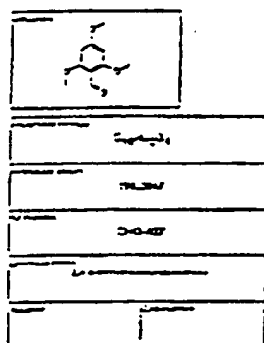
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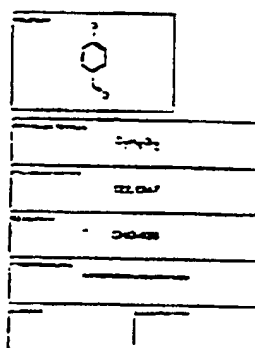
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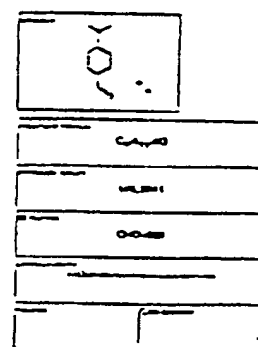
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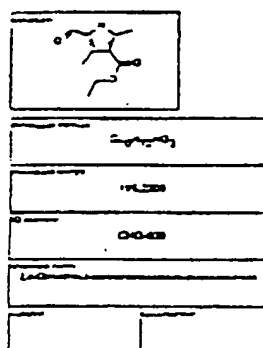
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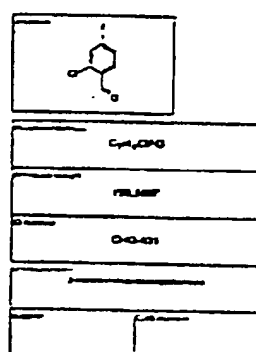
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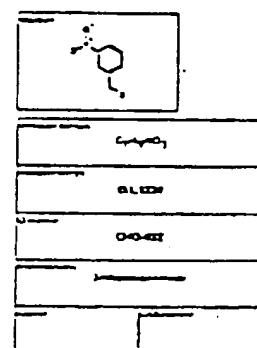
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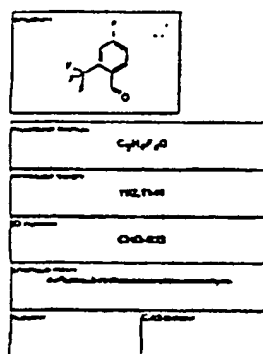
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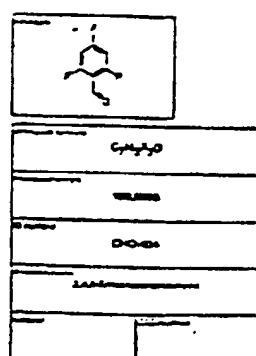
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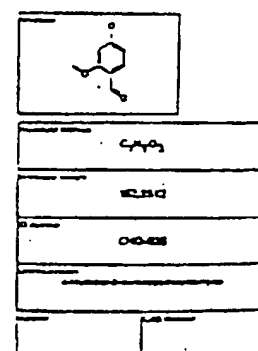
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A158



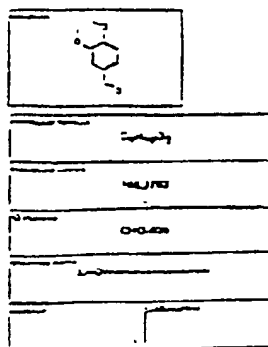
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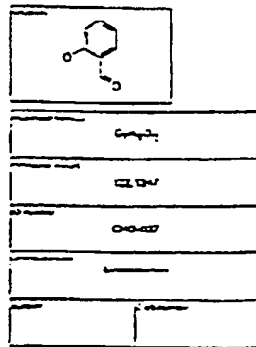
A160

Figure 2, Sheet 10 of 30

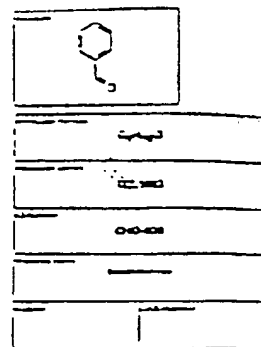
23 / 42



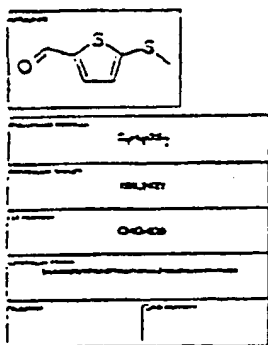
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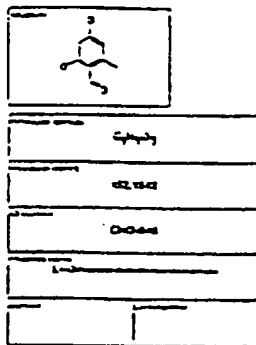
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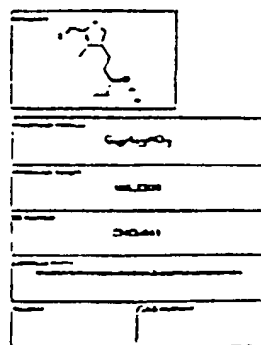
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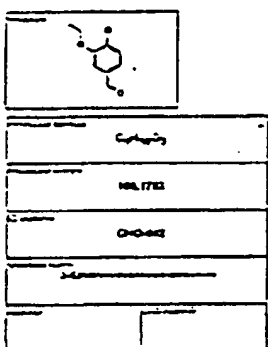
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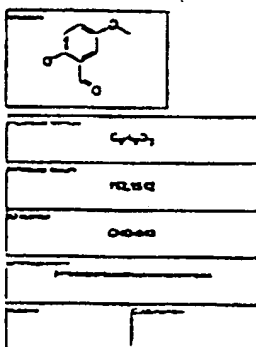
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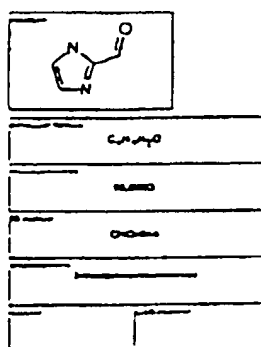
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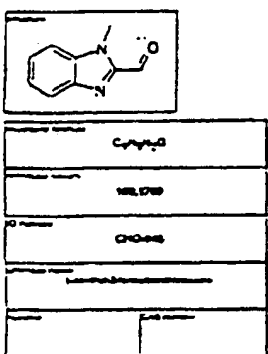
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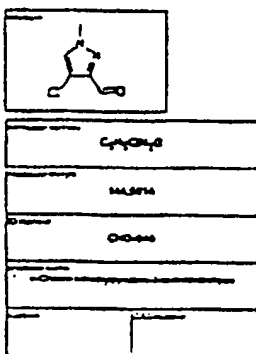
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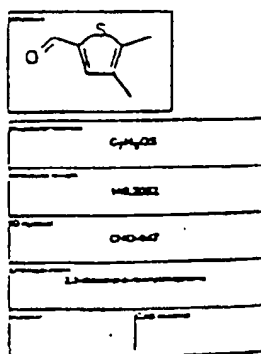
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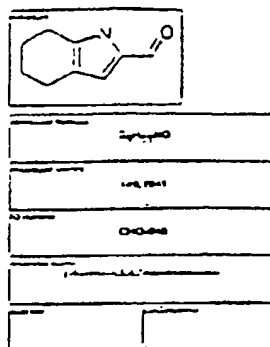
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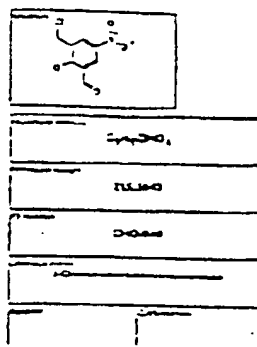
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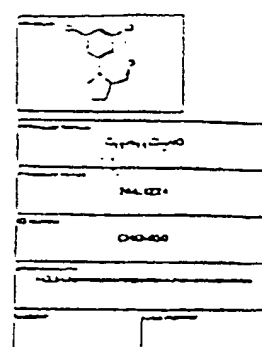
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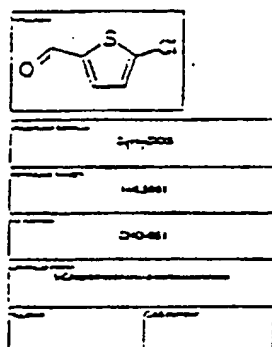
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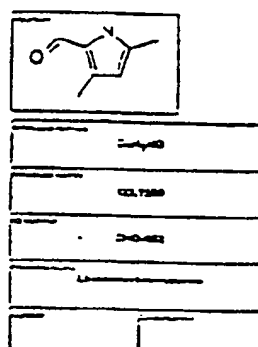
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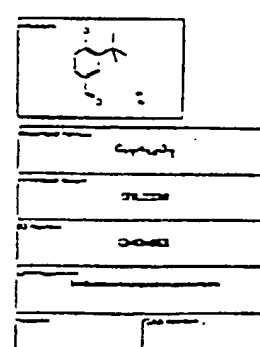
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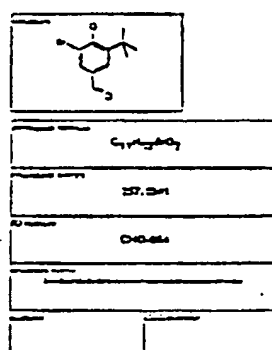
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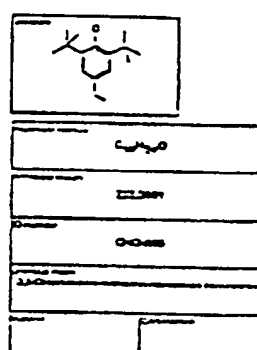
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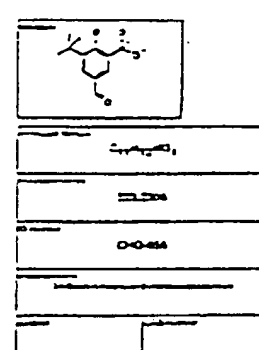
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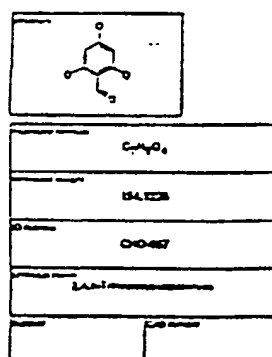
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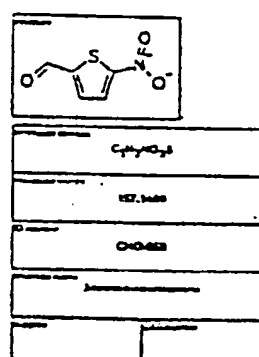
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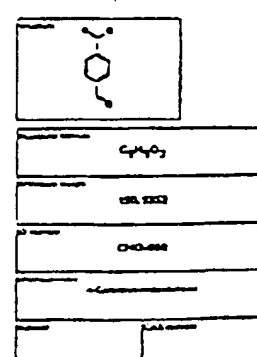
A181



A182

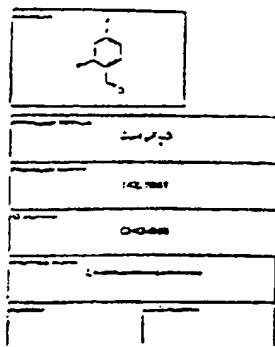


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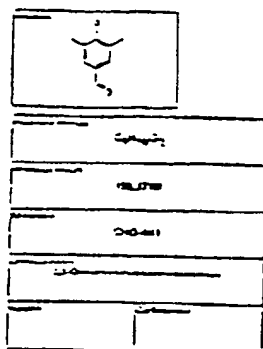


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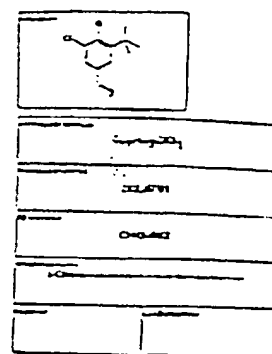
Figure 2, Sheet 12 of 30



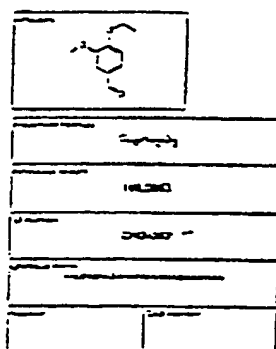
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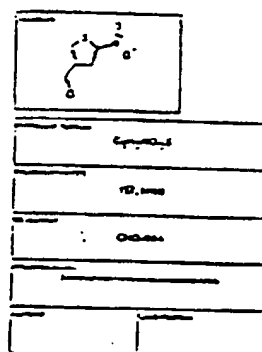
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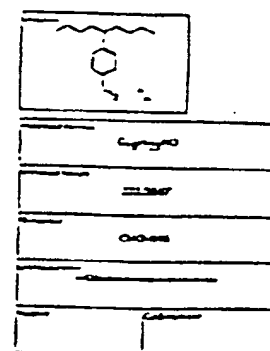
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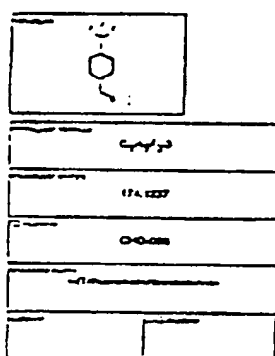
A188



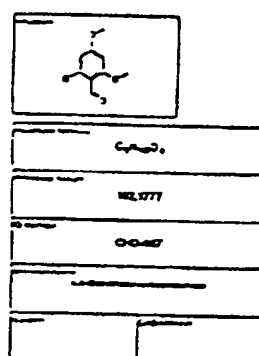
A189



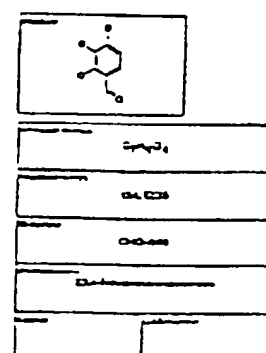
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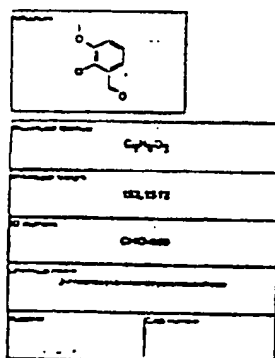
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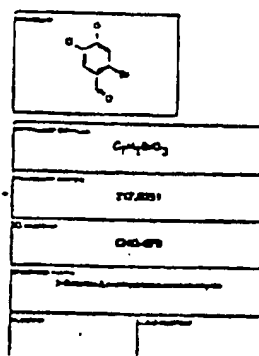
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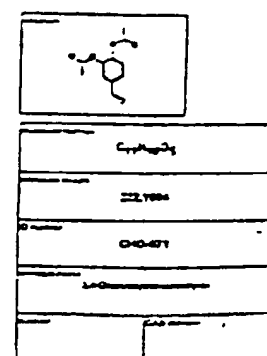
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A194



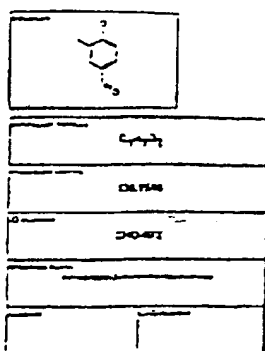
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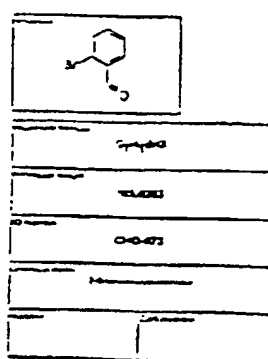
A196

Figure 2, Sheet 13 of 30

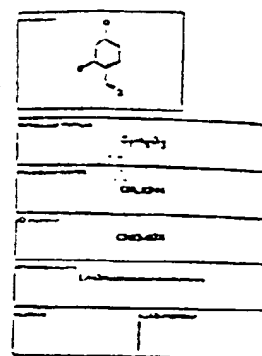




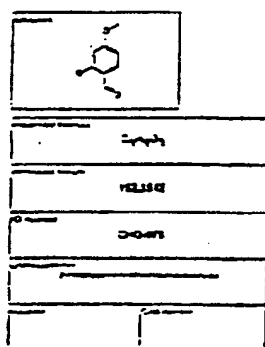
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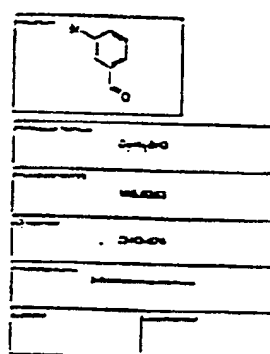
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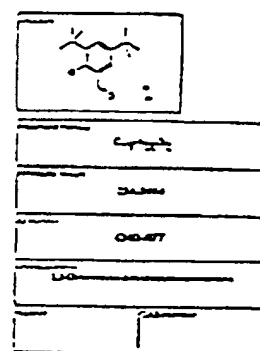
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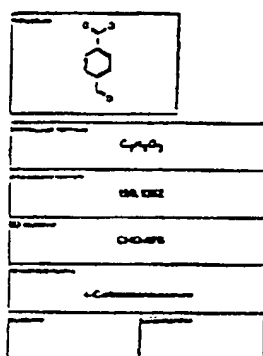
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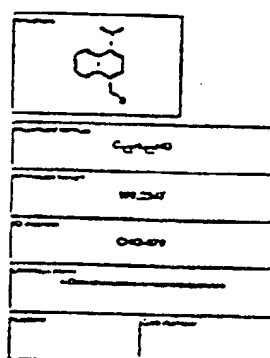
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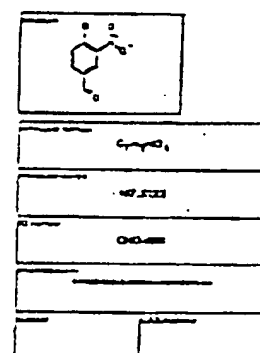
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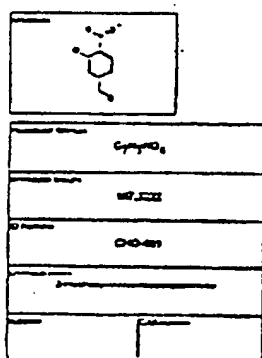
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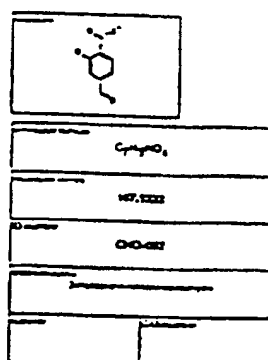
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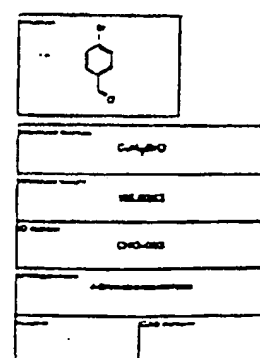
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A206

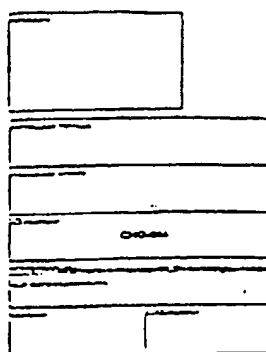


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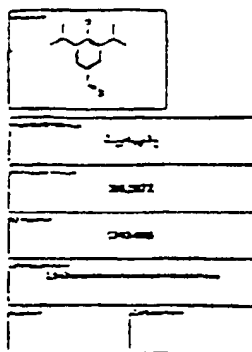


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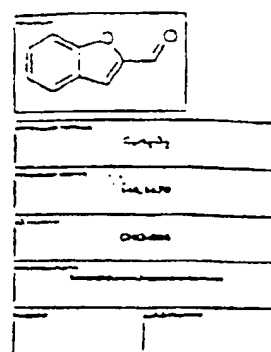
Figure 2, Sheet 14 of 30



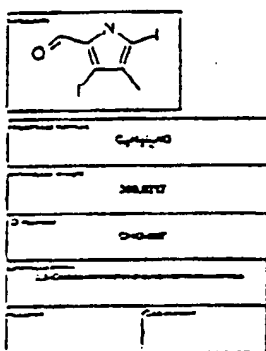
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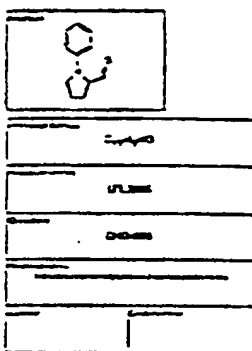
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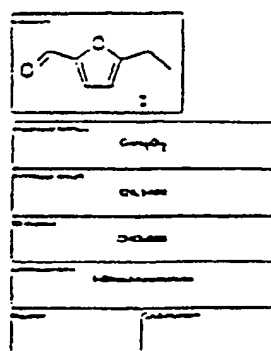
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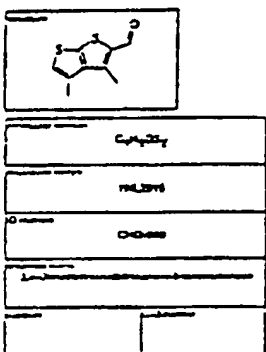
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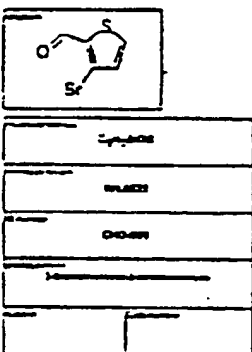
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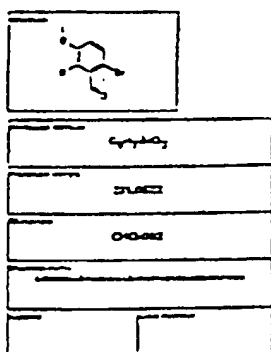
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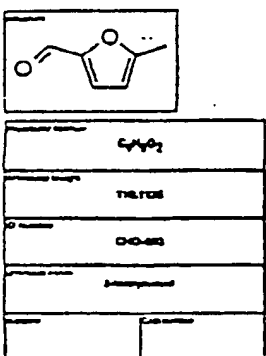
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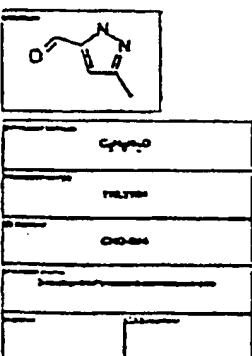
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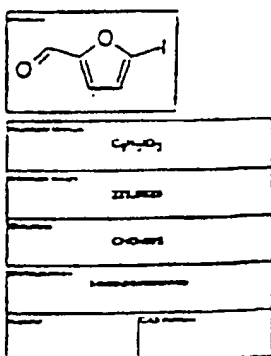
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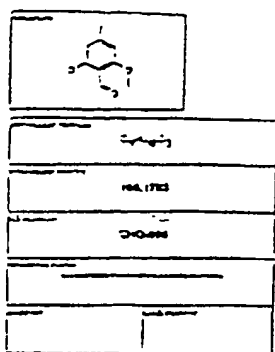
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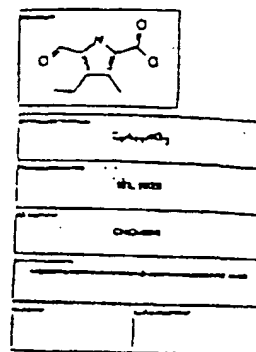
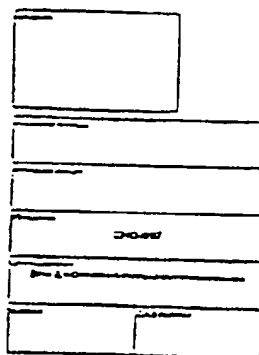
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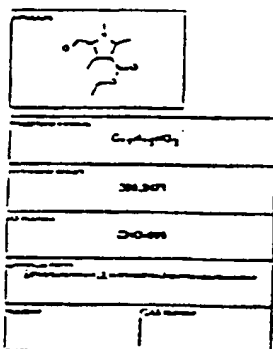
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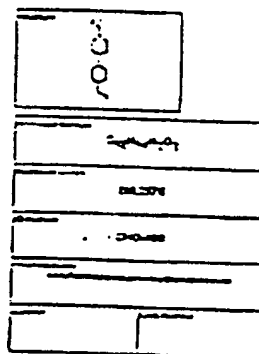
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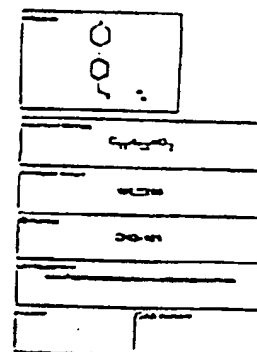
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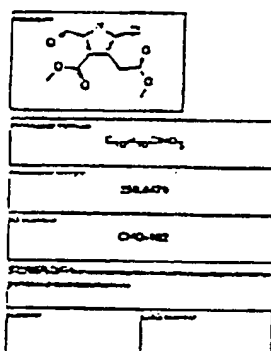
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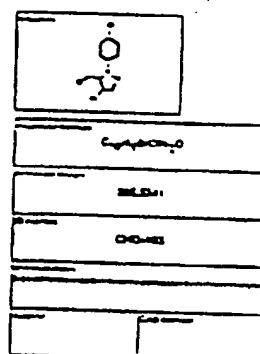
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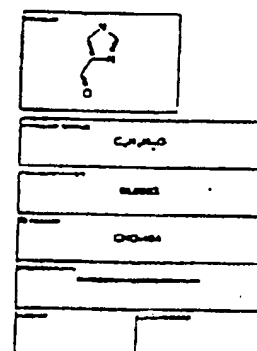
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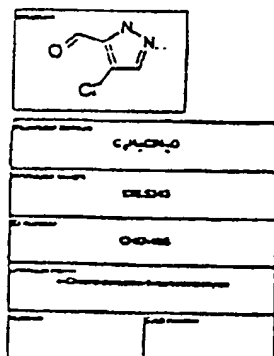
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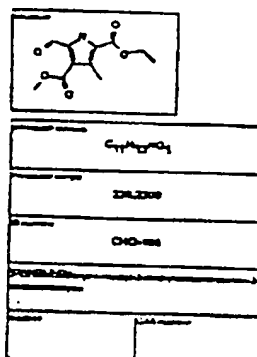
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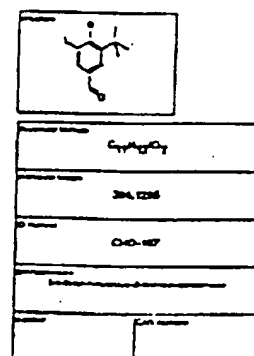
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A229

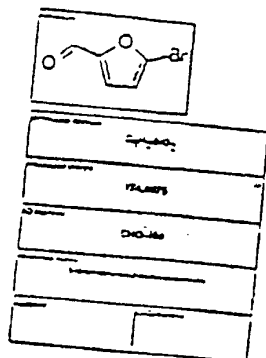


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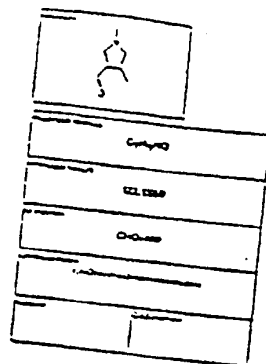


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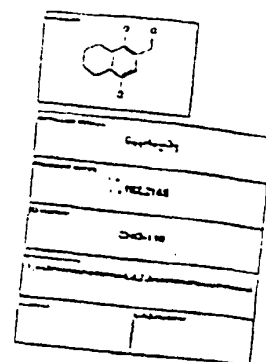
Figure 2, Sheet 16 of 30



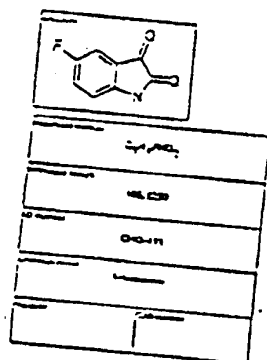
A232



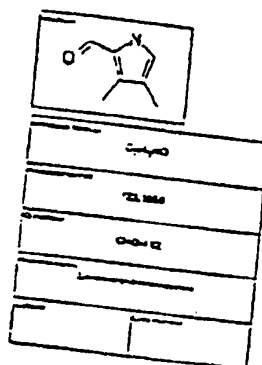
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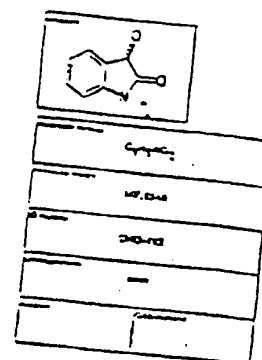
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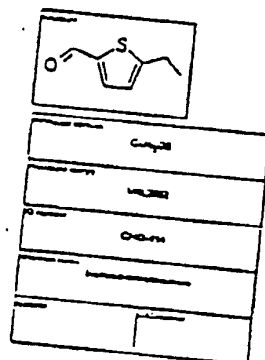
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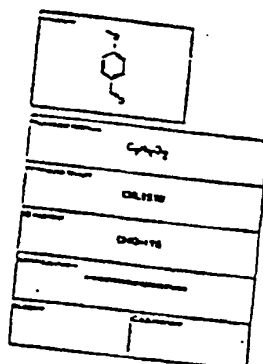
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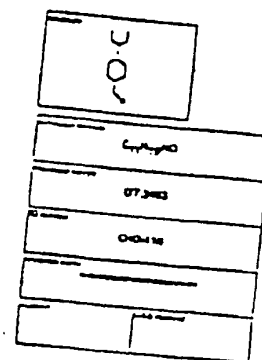
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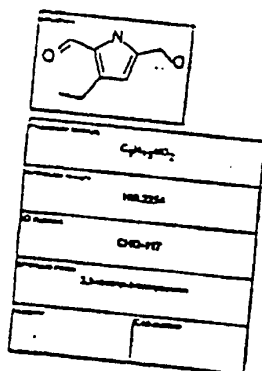
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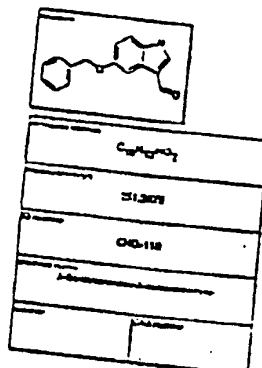
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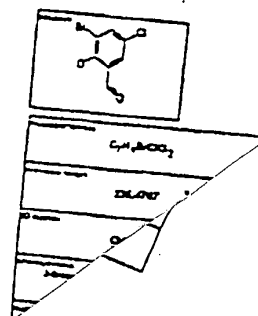
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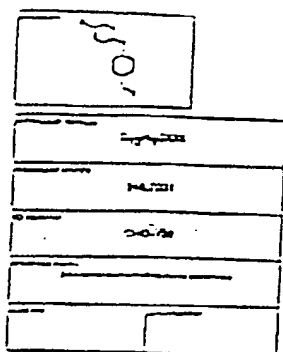


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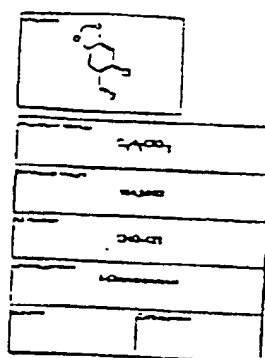


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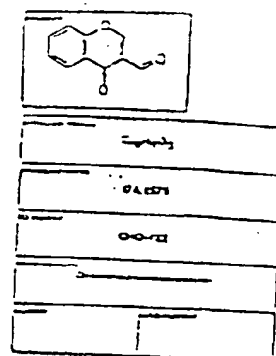




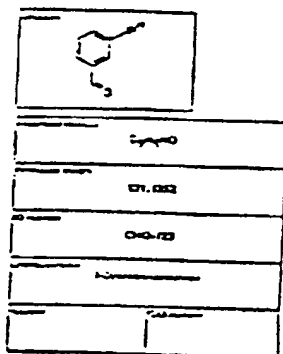
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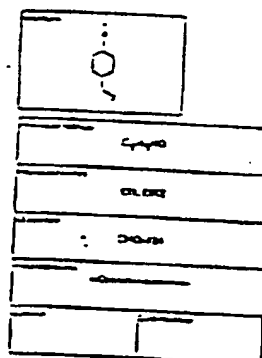
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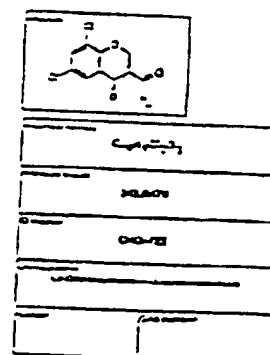
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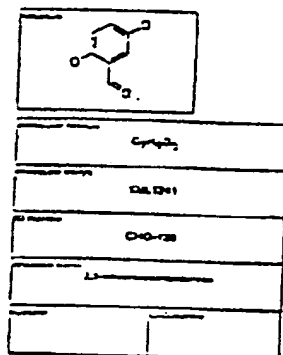
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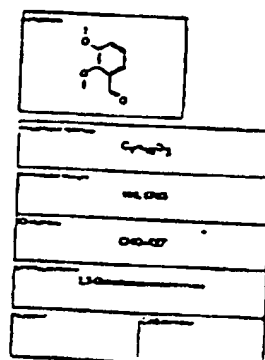
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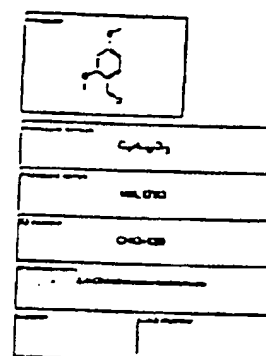
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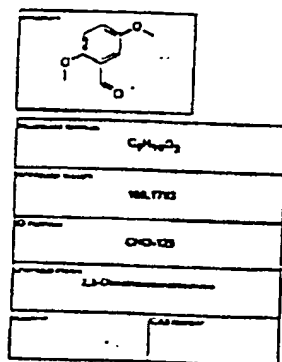
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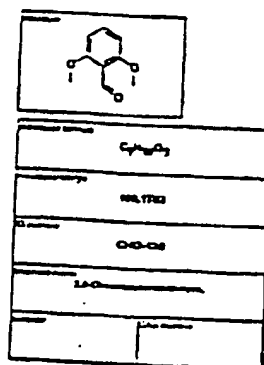
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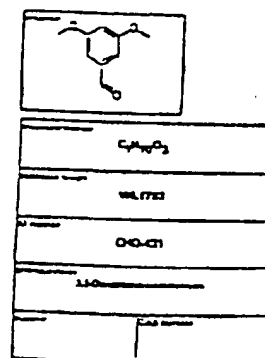
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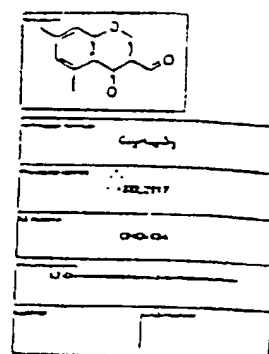
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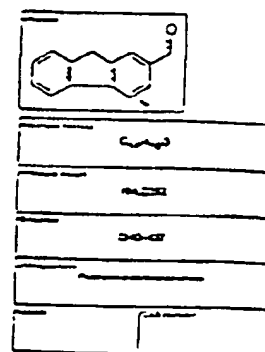
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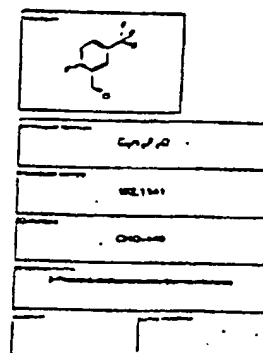
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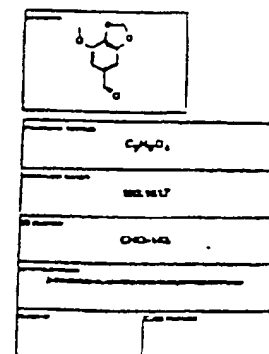
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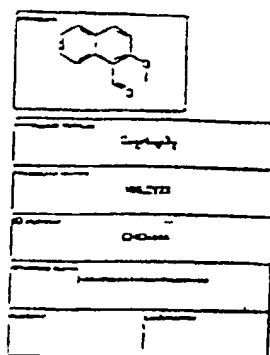
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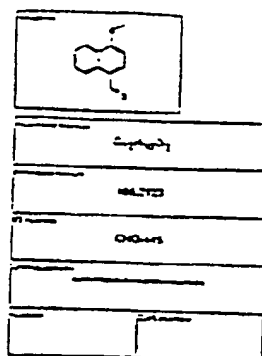
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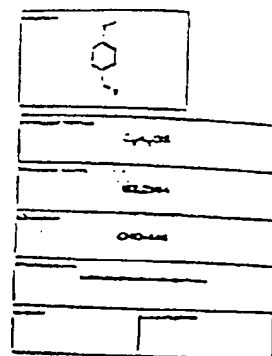
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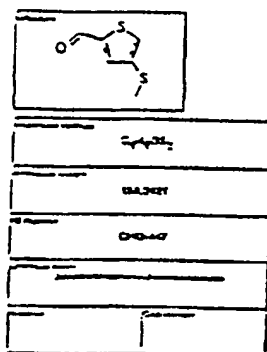
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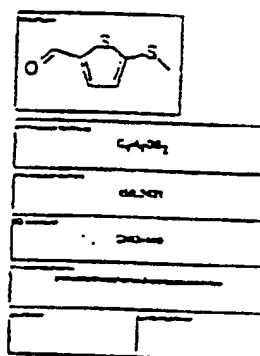
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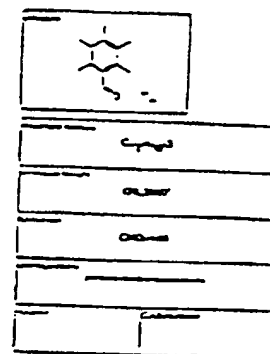
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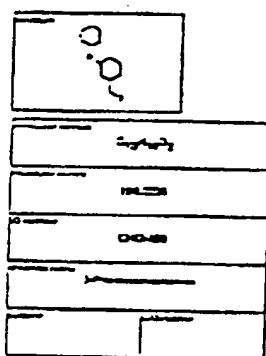
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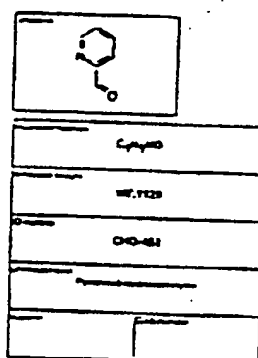
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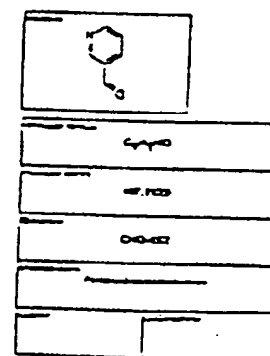
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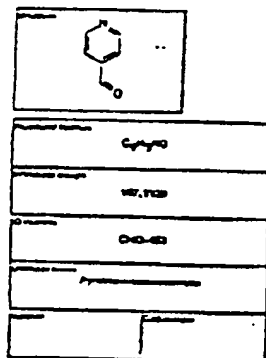
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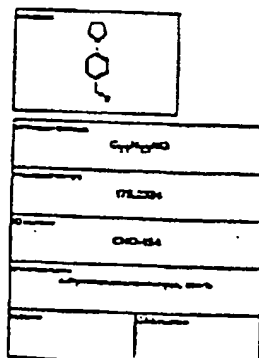
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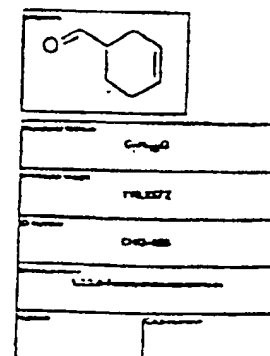
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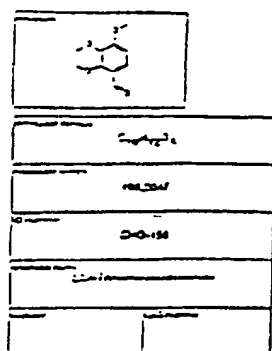
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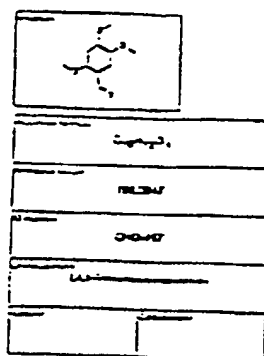
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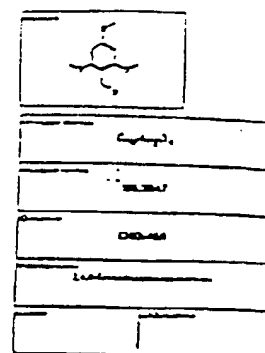
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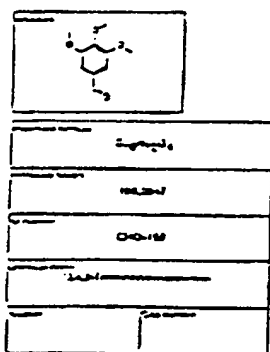
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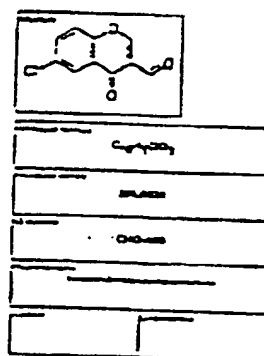
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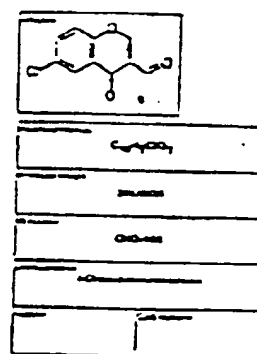
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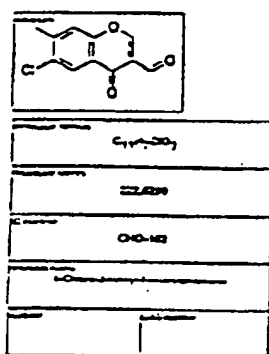
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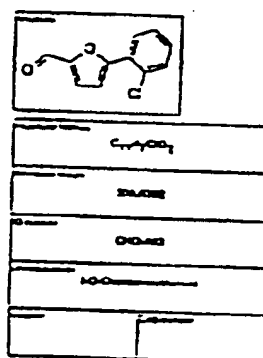
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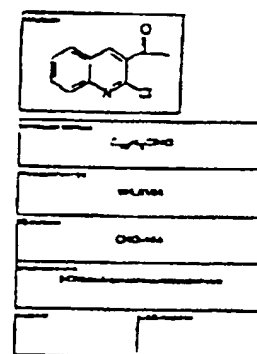
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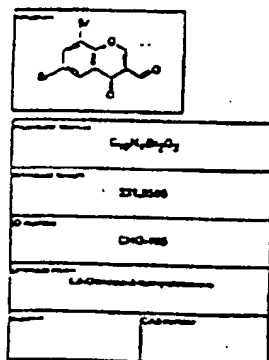
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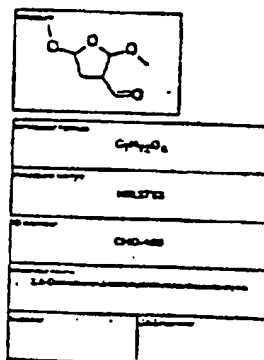
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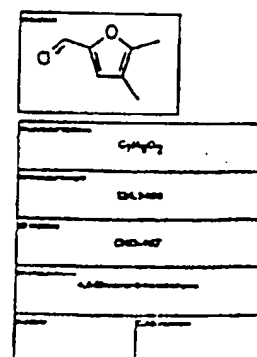
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A289

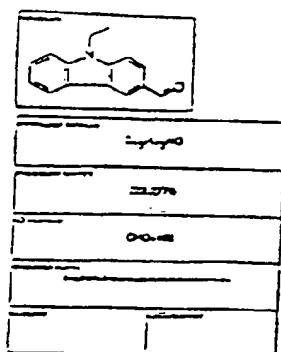


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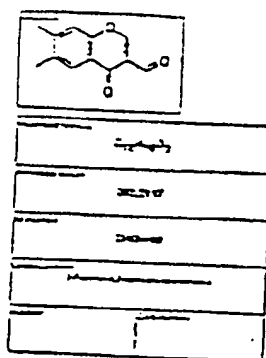


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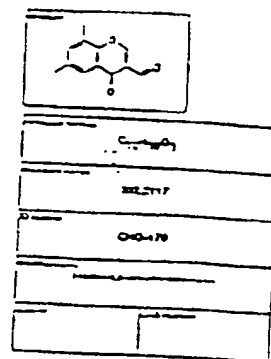




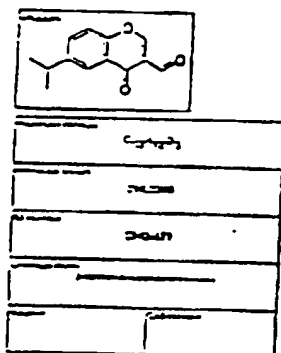
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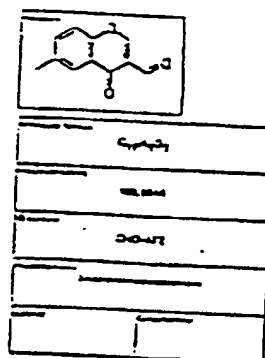
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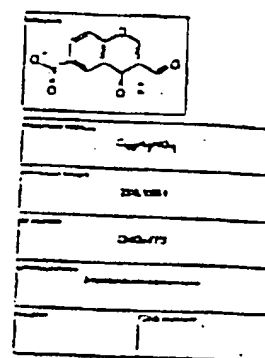
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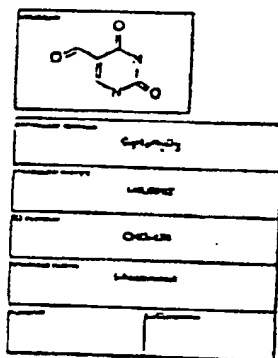
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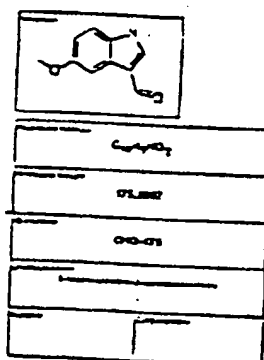
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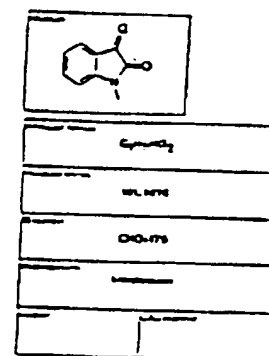
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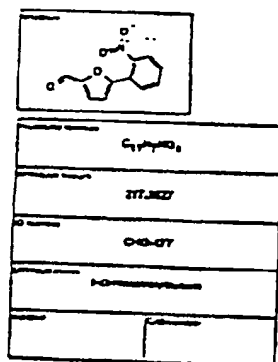
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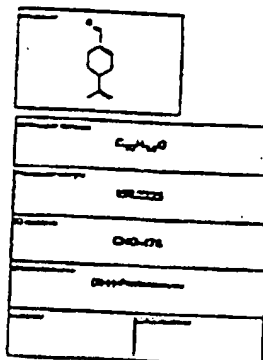
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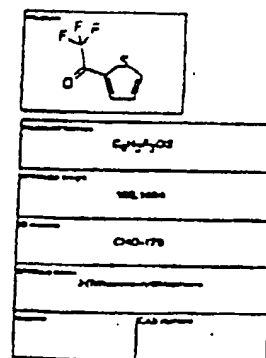
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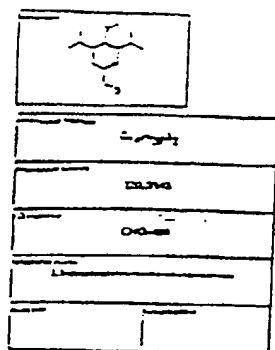
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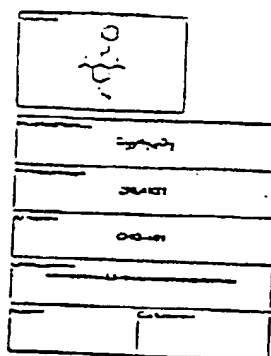
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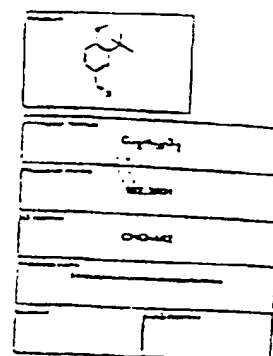
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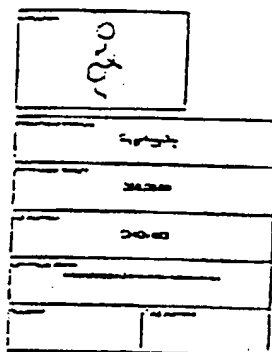
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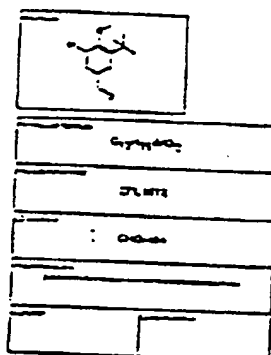
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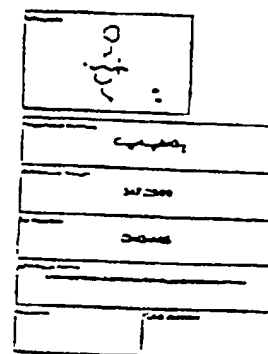
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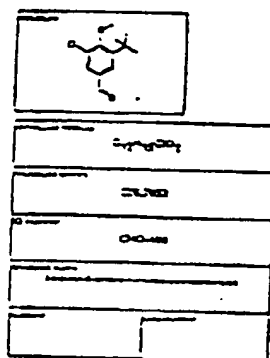
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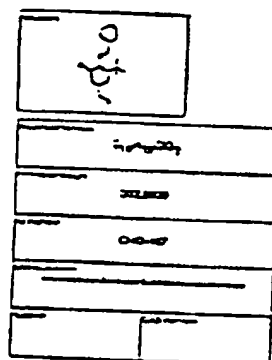
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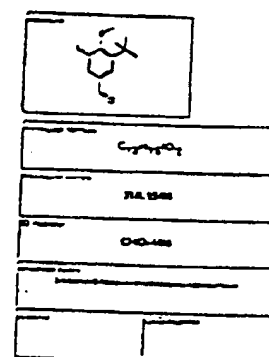
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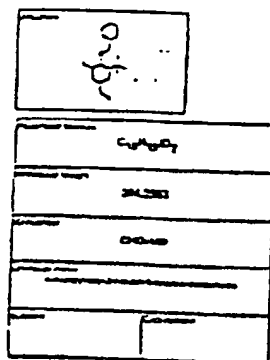
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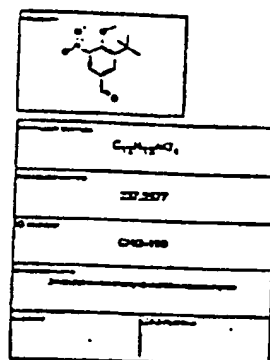
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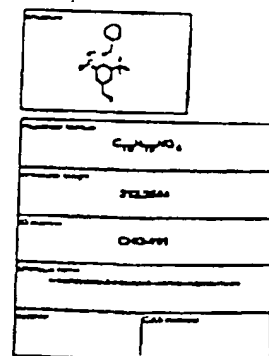
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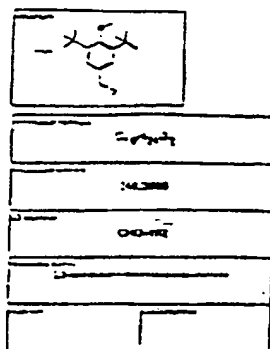
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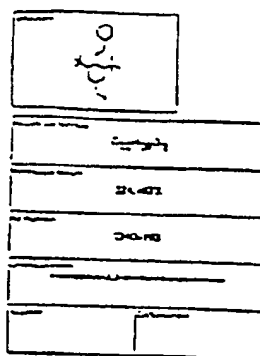
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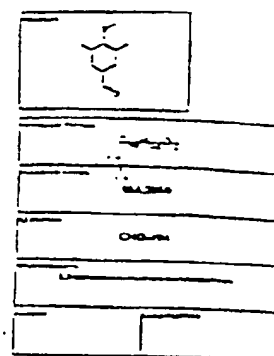
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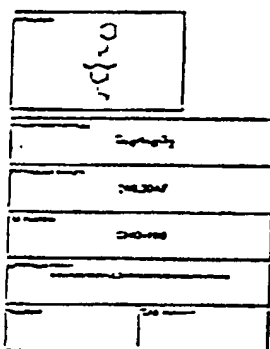
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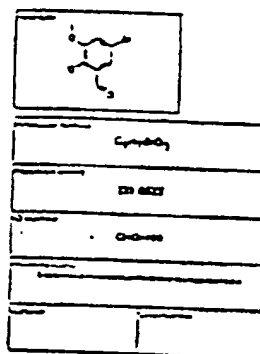
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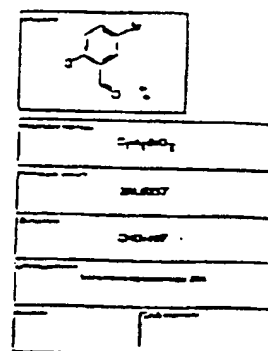
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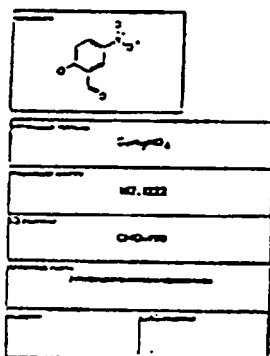
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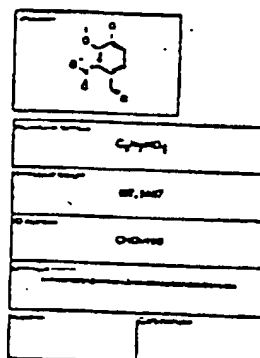
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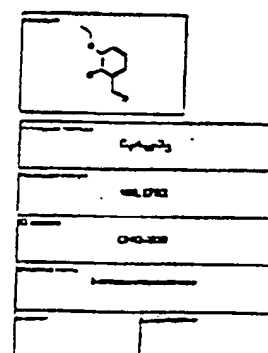
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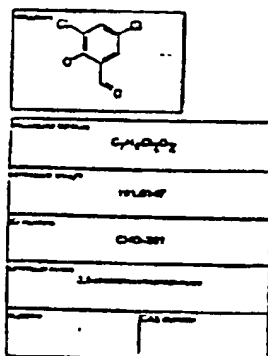
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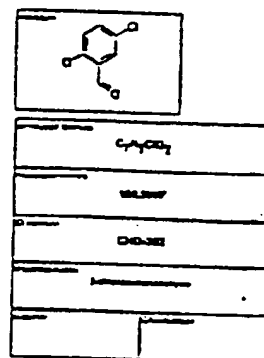
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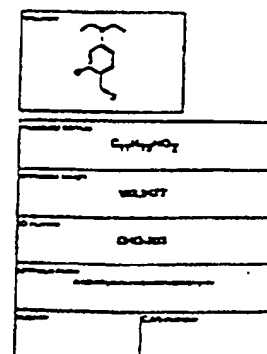
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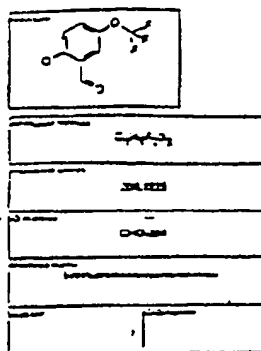


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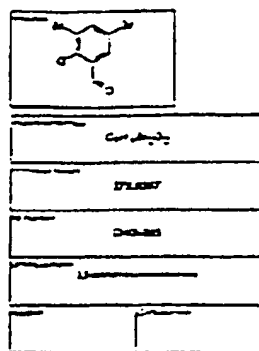


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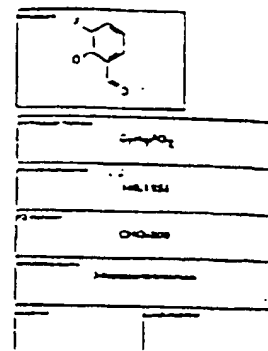
Figure 2, Sheet 24 of 30



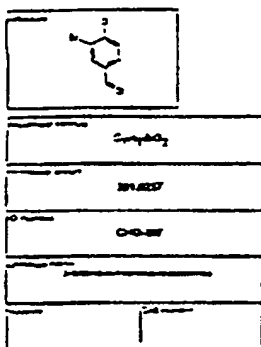
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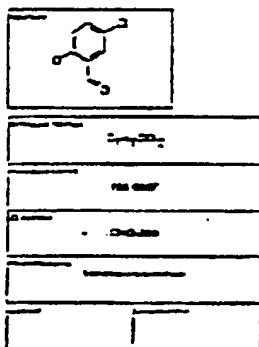
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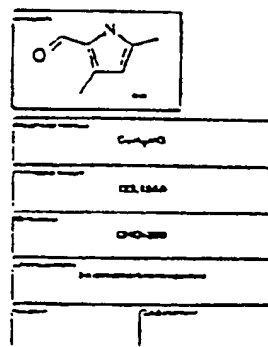
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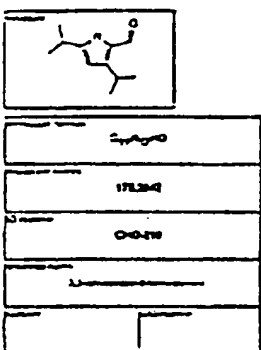
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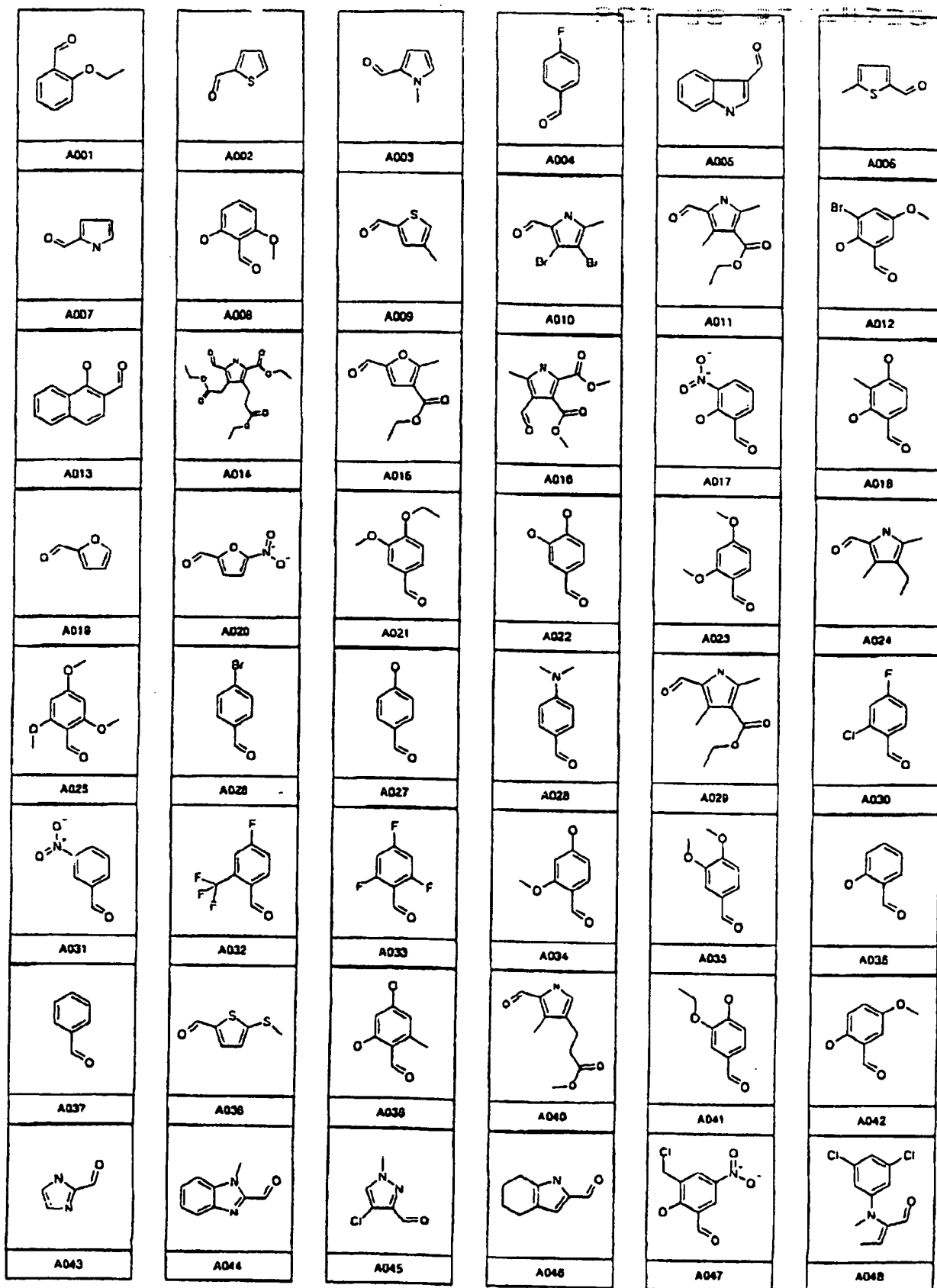


Figure 2, Sheet 26 of 30

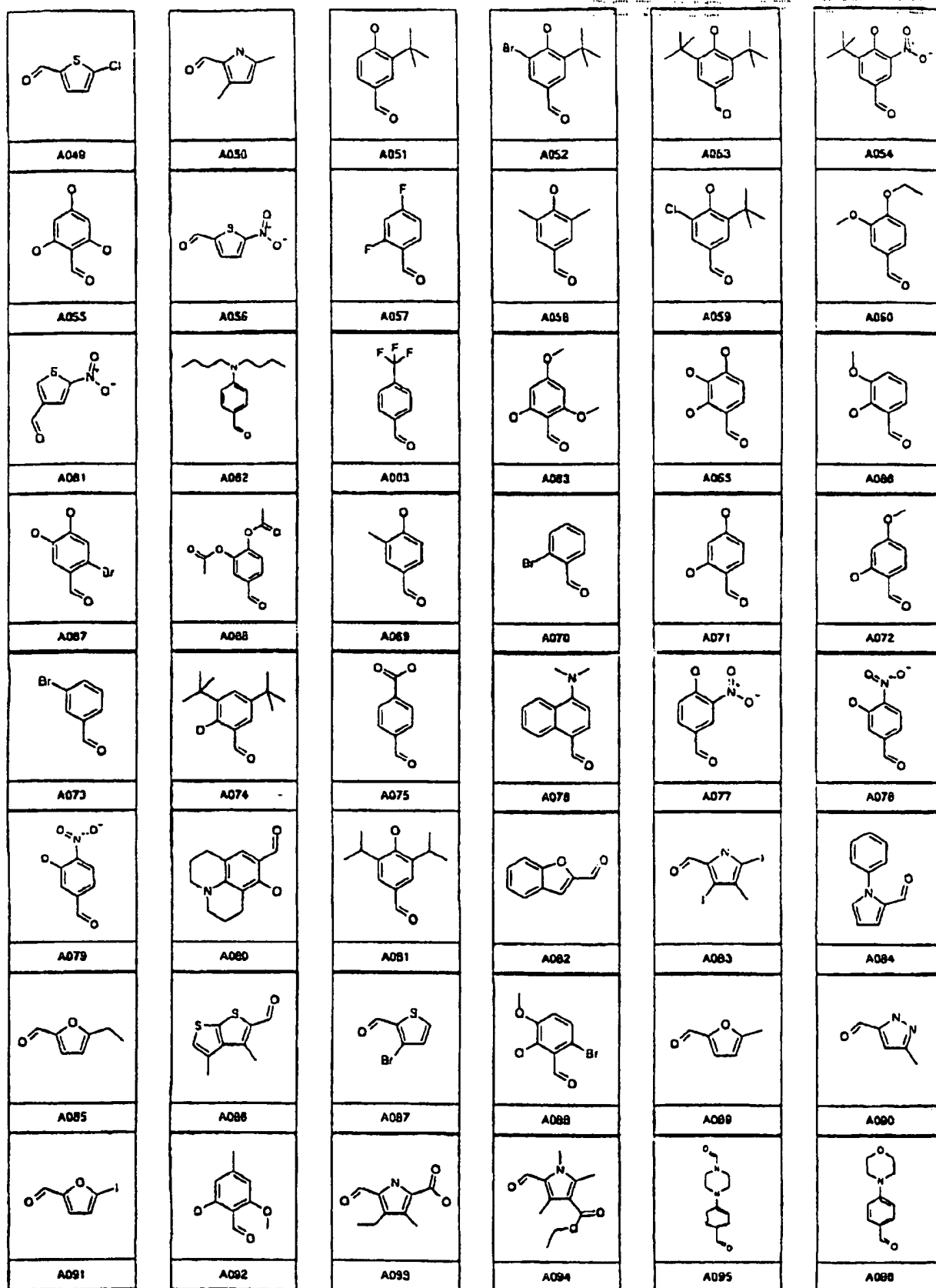


Figure 2, Sheet 27 of 30

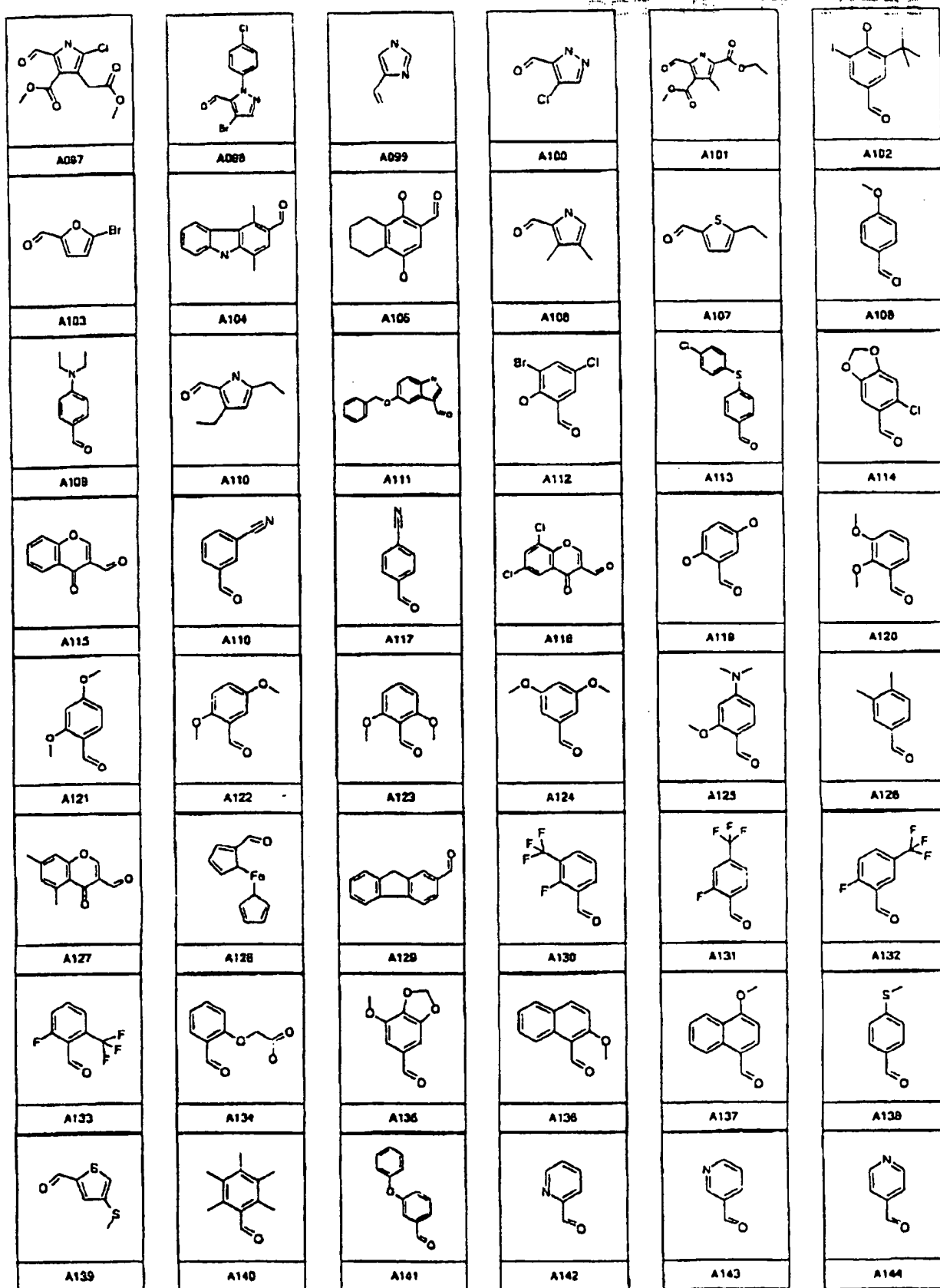


Figure 2, Sheet 28 of 30

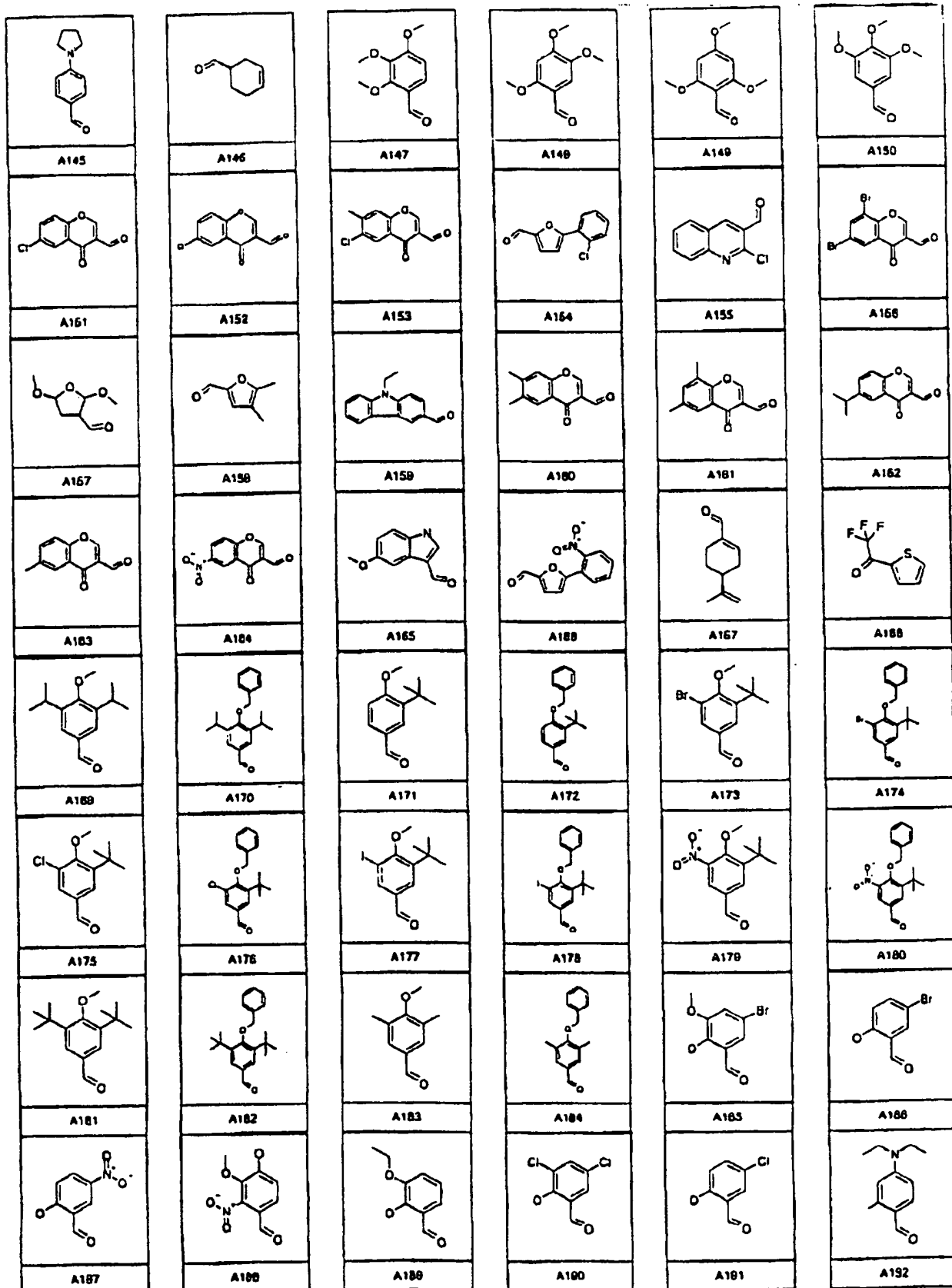


Figure 2, Sheet 29 of 30



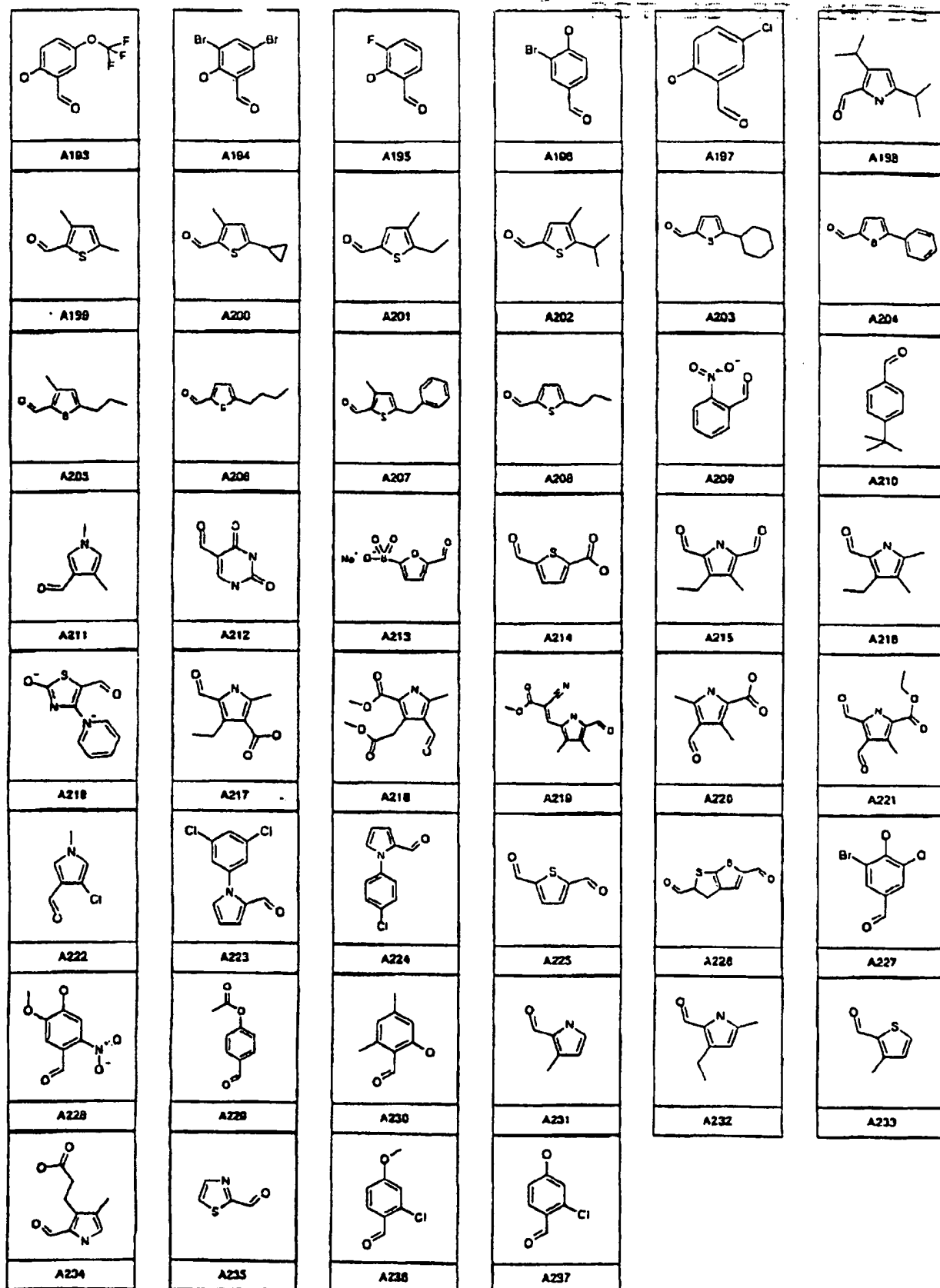


Figure 2, Sheet 30 of 30

# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 97/14736

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C07D209/34 C07D409/06 C07D403/06 A61K31/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 525 472 A (ERBA CARLO SPA) 3 February 1993 see the whole document ---	5-17
X	WO 96 22976 A (PHARMACIA SPA ;BUZZETTI FRANCO (IT); BRASCA MARIA GABRIELLA (IT);) 1 August 1996 cited in the application see claims; examples ---	5-17
X	WO 96 00226 A (PHARMACIA SPA ;BUZZETTI FRANCO (IT); BRASCA GABRIELLA MARIA (IT);) 4 January 1996 see claims; examples ---	5-17
X	WO 95 01349 A (ERBA CARLO SPA) 12 January 1995 see the whole document ---	10-17
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

5 January 1998

Date of mailing of the international search report

16. 01. 98

Name and mailing address of the ISA

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Fax: (+31-70) 340-3016

Authorized officer

De Jong, B

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/14736

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	WO 91 13055 A (ERBA CARLO SPA) 5 September 1991 see the whole document ---	5-17
X	EP 0 580 502 A (ADIR) 26 January 1994 see the whole document ---	10-17
X	EP 0 662 473 A (PHARMACIA SPA) 12 July 1995 see the whole document ---	5-17
X	ANDREANI, ALDO ET AL: "Potential antitumor agents. 25 [1]. Synthesis and cytotoxic activity of 3-(2-chloro-3-indolyl)methylene)-1,3-dihydroindol-2-ones" ANTICANCER RES. (1996), 16(6B), 3585-3588 CODEN: ANTRD4;ISSN: 0250-7005, 1996, XP002049948 see figure 1 ---	5
X	US 2 968 557 A (L. BURGARDT ET AL.) 17 January 1961 see claims; examples 4,10 ---	5
A	TERRETT N K ET AL: "COMBINATIONRIAL SYNTHESIS - THE DESIGN OF COMPOUND LIBRARIES AND THEIR APPLICATION TO DRUG DISCOVERY" TETRAHEDRON, vol. 51, no. 30, 24 July 1995, pages 8135-8173, XP000644580 ---	1-4
X	DATABASE CROSSFIRE Beilstein 3-(4-methylbenzilidene)-1,3-dihydroindol-2-one, XP002049949 see abstract & CODA ET AL.: JOURNAL OF THE CHEMICAL SOCIETY, PERKIN TRANSACTIONS 2, vol. 4, 1984, LETCHWORTH GB, pages 615-620, ---	11
X	DATABASE CROSSFIRE Beilstein 3-benzilidene-5-methyl-1,3-dihydroindol-2-one, XP002049950 see abstract & WAHL; FAIVRET: ANN. CHIM., 1926, PARIS, page 350 ---	11

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 97/14736

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	<p>DATABASE CROSSFIRE Beilstein 1-methyl-2-(3-oxindolidenmethyl)- pyridinium, XP002049951 see abstract &amp; ELLIOT; RIVERS: JOURNAL OF ORGANIC CHEMISTRY, vol. 29, 1964, EASTON US, page 2438</p>	11
P,X	<p>--- WO 96 40116 A (SUGEN INC) 19 December 1996 cited in the application see the whole document</p>	10-17
P,X	<p>--- WO 96 32380 A (PHARMACIA SPA ;BATTISTINI CARLO (IT); BALLINARI DARIO (IT); ERMOLI) 17 October 1996 see the whole document -----</p>	5-17

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 97/14736

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

Claims Nos.: 5, 9-13

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Claims 5, 9-13 are so broad that for determining the scope of a meaningful international search due account has been taken of Rule 33.3 PCT; special emphasis was put on combinatorial libraries of indolinone compounds.

Remark : Although claims 14-17 are directed to a method of treatment of the human/animal body , the search has been carried out and based on the alleged effects of the compound/composition.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Information: Application No

PCT/US 97/14736

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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International Application No

PCT/US 97/14736

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